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Proceedings of The Second Pan American Scientific Congress

WASHINGTON, U. S. A.

Monday, December 27, 1915
to Saturday, January 8, 1916

Compiled and edited under the direction of
Glen Levin Swiggett, Assistant Secretary General

SECTION IX

TRANSPORTATION, COMMERCE, FINANCE AND TAXATION

LEO S. ROWE, HEAD PROFESSOR OF POLITICAL SCIENCE
UNIVERSITY OF PENNSYLVANIA, CHAIRMAN



VOL. XI

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CONTENTS.

LETTERS OF TRANSMITTAL.

WASHINGTON, D. C., *May 31, 1917.*

SIR: Pursuant to the recommendation of the executive committee of the Second Pan American Scientific Congress, which was held in Washington December 27, 1915–January 8, 1916, and by the cooperation of the United States Congress (urgent deficiency bill, Sept. 8, 1916), the papers and discussions of that great international scientific gathering have been compiled and edited for publication under the able direction of the Assistant Secretary General, Dr. Glen Levin Swiggett. In this volume is contained the report of Section IX, of which Dr. L. S. Rowe, of the executive committee was chairman.

In my formal report, which has already been submitted, I enlarged upon the importance of the Second Pan American Scientific Congress, its large attendance, and the high quality of its papers and discussions. I will, therefore, in this letter, which, in slightly varied form, introduces each volume, make only a few general references.

All of the 21 Republics of the Western Hemisphere were represented by official delegates at the Congress. Unofficial delegates, moreover, from the leading scientific associations and educational institutions of these Republics presented papers and took part in its deliberations. The papers and discussions may be considered, therefore, as an expression of comprehensive Pan American scientific effort and possess, in consequence, inestimable value.

The Congress was divided into nine main sections, which, with their chairmen, were as follows:

I. ANTHROPOLOGY. W. H. Holmes.
II. ASTRONOMY, METEOROLOGY, AND SEISMOLOGY. Robert S. Woodward.
III. CONSERVATION OF NATURAL RESOURCES, Agriculture, Irrigation, and Forestry. George M. Rommel.
IV. EDUCATION. P. P. Claxton.
V. ENGINEERING. W. H. Bixby.
VI. INTERNATIONAL LAW, PUBLIC LAW, AND JURISPRUDENCE. James Brown Scott.
VII. MINING, METALLURGY, ECONOMIC GEOLOGY, AND APPLIED CHEMISTRY. Hennen Jennings.
VIII. PUBLIC HEALTH AND MEDICAL SCIENCE. William C. Gorgas.
IX. TRANSPORTATION, COMMERCE, FINANCE, AND TAXATION. L. S. Rowe.

These sections, in turn, were further subdivided into 45 subsections.

Over 200 delegates were in attendance from the Latin American Republics, while over a thousand from the United States participated in its meetings. The discussions and proceedings of the Congress attracted world-wide attention, and it was undoubtedly the greatest international scientific meeting that has assembled anywhere in the history of the Western Hemisphere and possibly of the world. It was, therefore, a fitting successor to the first Pan American Scientific Congress, which assembled in Santiago, the capital of Chile, in 1908, and to its predecessors, confined to Latin American representation, which in former years met, respectively, in Rio de Janeiro, Montevideo, and Buenos Aires. Its success was a logical result of these preceding gatherings in Latin America and of the hearty cooperation of the Latin American Governments and scientists.

To those who may have their attention brought only to the individual volumes covering the papers and discussions and who wish to know more of the proceedings of the Congress and the results accomplished by it, it is recommended that they should

also read "The Final Act—An Interpretative Commentary Thereon," prepared under the direction of Dr. James Brown Scott, reporter general of the Congress, and the report of the secretary general, prepared by the latter and the assistant secretary general, Dr. Glen Levin Swiggett. In these will be found not only the final act and the illuminating comment thereon but lists of delegates, participating Governments, societies, educational institutions, and other organizations, together with a careful story and history of the Congress. They can be obtained by addressing the Director General of the Pan American Union, Washington, D. C.

In conclusion, I want to briefly repeat, as secretary general of the Congress, my appreciation, already expressed in my formal report, of the hearty cooperation in making the Congress a success given by everyone concerned from the President of the United States, yourself as Secretary of State, and the delegates of Latin America and the United States, down to the office employees. The great interest manifested by the permanent executive committee, headed by Mr. William Phillips, then Third Assistant Secretary of State, the Carnegie Endowment for International Peace through its secretary, Dr. James Brown Scott, and the executive aid of Dr. Glen Levin Swiggett, as assistant secretary general, were vitally instrumental in making the gathering memorable. The Pan American Union, the official international organization of all the American Republics, and whose governing board is made up of the Latin American diplomats in Washington and the Secretary of State of the United States, lent the favorable influence of that powerful organization to the success of the Congress and authorized me as the director general of the Union to also take up the duties of secretary general of the Congress.

Yours, very truly,

(Signed) JOHN BARRETT,
Secretary General.

The Honorable The SECRETARY OF STATE,
Washington, D. C.

WASHINGTON, D. C., *31 de maio de 1917.*

EXMO. SNR.: Em cumprimento de uma recommendação emanada da Commissão Executiva do Segundo Congresso Scientifico Pan Americano, que teve lugar em Washington, de 27 de dezembro de 1915 a 8 de janeiro de 1916, e, devido ao auxilio do Congresso dos Estados Unidos (Lei para Orçamentos extraordinarios de 8 de setembro, 1916) as memorias e as discussões dessa assemblêa scientifica internacional, foram colligidas e preparadas para publicação sob a proficiente direcção do Secretario Geral Adjuncto, Dr. Glen Levin Swiggett. Este volume comprehende o relatorio da secção IX que foi presidida pelo Snr. L. S. Rowe, da Commissão Executiva.

No meu relatorio official, que já tive a honra de apresentar, me detive sobre a importancia do Segundo Congresso Scientifico Pan Americano, da sua grande concorrencia e da alta importancia das theses e das discussões. Na presente nota, portanto, de uma maneira muito ligeira, destinada a apresentar cada um dos volumes, eu farei apenas algumas referencias muito geraes.

Todas as Republicas do Hemispherio Occidental, vinte e uma em numero, se achavam representadas por delegados officiaes ao Congresso. Delegados sem nomeação dos Governos, mas representando as mais notaveis sociedades scientificas e instituições de ensino dessas republicas apresentaram theses e tomaram parte nas deliberações. As memorias e discussões devem ser consideradas portanto, como a expressão de um justificavel trabalho scientifico Pan Americano e possue, por esse motivo, um valor sem egual.

O Congresso foi dividido em nove secções principaes, que a seguir enumèro, com os nomes dos seus presidentes:

I. ANTHROPOLOGIA. W. H. Holmes.

II. ASTRONOMIA, METEREOLOGIA E SISMOLOGIA. Robert S. Woodward.

III. Conservação da Riqueza Nacional, Agricultura, Irrigação e Silvicultura. George M. Rommel.
IV. Instrucção. P. P. Claxton.
V. Engenharia. W. H. Bixby.
VI. Direito Internacional, Direito Publico e Jurisprudencia. James Brown Scott.
VII. Minas, Metallurgia, Geologia Practica e Chimica Industrial. Hennen Jennings.
VIII. Saude Publica e Sciencias Medicas. William C. Gorgas.
IX. Vias de Communicação, Commercio, Finanças e Impostos. L. S. Rowe.

Estas secções, por seu lado, eram subdivididas em 45 subsecções.

Mais de 200 delegados das Republicas da America Latina frequentaram as sessões emquanto os Estados Unidos se achavam representados por mais de mil pessoas. As discussões e os relatorios do Congresso attrahiram a attenção de todo o mundo e foi sem duvida a maior assemblea scientifica que se realizou no Hemispherio Occidental e talvez em todo o mundo. Foi sem duvida um idoneo continuador do Primeiro Congresso Scientifico Pan-Americano, que se celebrou em Santiago, capital da Republica Chilena em 1908 e das anteriores assembleas que previamente se tinham realizado, apenas com delegados da America Latina e que se reuniram em annos anteriores no Rio de Janeiro, Montevideu e Buenos Aires. O seu successo foi um resultado logico das reuniões previas na America Latina e do cordial concurso dos Governos da America latina e dos seus homens de sciencia.

A aquelles que não quizerem limitar-se a consultar os volumes que contém as memorias e as discussões e que desejarem conhecer alguma cousa mais dos trabalhos do Congresso e dos resultados por elle alcançado se lhes recommenda a leitura da Acta Final—a exposição geral concernente á mesma—publicada sob a direcção do Sr. Dr. James Brown Scott, Relator Geral do Congresso, e o relatorio do Secretario Geral, preparado pelo abaixo assignado e pelo Secretario Geral Adjuncto Sr. Dr. Glen Levin Swiggett. Nestes trabalhos encontrar-se-hão não sómente a acta final mas tambem um magnifico commentario, a lista dos delegados dos Governos que adheriram, sociedades, instituições de ensino e outras corporações, seguidas de uma cuidadosa historia do Congresso. Estes volumes continuam á disposição dos que os pedirem ao Director Geral da União Pan-Americana, Washington, D. C.

Em conclusão, eu desejo repetir, em duas palavras, como Secretario Geral do Congresso, o meu apreço e reconhecimento, que já tive occasião de exprimir no meu relatorio official, pela cordial cooperação que por todos me foi prestada para levar a bom exito este congresso, desde o Presidente dos Estados Unidos, V. Exa., como Secretario d'Estado, os Senhores Delegados da America Latina e dos Estados Unidos até os diversos funccionarios do Congresso. O grande interesse manifestado pela Commissão Permanente Executiva presidida pelo Sr. William Phillips, ao tempo terceiro Sub-secretario d'Estado, pelo Instituto de Carnegie para a Paz Internacional na pessoa do Sr. Dr. James Brown Scott, assim como a collaboração prestada pela Sr. Dr. Glen Levin Swiggett, como Secretario Geral Adjuncto, constituiram obras basilares para o successo desta reunião.

A União Pan-Americana, instituição internacional sustentada por todas as Republicas Americanas e cujo Conselho de Administração é constituido pelos representantes diplomaticos em Washington e pelo Secretario d'Estado dos Estados Unidos, contribuiu com a sua poderosa influencia para o bom exito do Congresso e me auctorizou a servir de Secretario Geral do Congresso.

Com a maior consideração, subscrevo-me

De V. Exa.,
Vor. Mto. Atto.,
(Ass.) John Barrett,
Secretario Geral.

Exmo. Snr. Secretario de Estado,
Washington, D. C.

WASHINGTON, D. C., *31 de mayo de 1917*.

SEÑOR:

En cumplimiento de una recomendación emanada de la Comisión Ejecutiva del Segundo Congreso Científico Panamericano que se reunió en Wáshington desde el 27 de diciembre de 1915 hasta el 8 de enero de 1916 y gracias a la cooperación al efecto prestada por el Congreso de los Estados Unidos mediante su ley sobre rectificación del presupuesto dictada el 8 de setiembre de 1916, hánse recopilado y preparado para su publicación, bajo la hábil dirección del Sr. Dr. Glen Levin Swiggett, Subsecretario General, las memorias presentadas a dicho Congreso y los debates a que dieron lugar. El presente volumen contiene el informe relativo a la Sección IX, de la cual fué presidente el Sr. L. S. Rowe, miembro de la Comisión Ejecutiva.

En el informe general que ya tuve el honor de presentarle, me fué dable considerar detenidamemte la importancia del Segundo Congreso Científico Panamericano, la numerosa concurrencia que al mismo asistió y el elevado mérito de las memorias presentadas y de los debates que en aquel se suscitaron. Por consiguiente, he de limitarme en la presente, destinada a servirle de mera introducción a cada uno de los volúmenes, a algunas consideraciones de carácter general.

En el Congreso estuvieron representadas por medio de delegaciones oficiales las veinte y una repúblicas del Hemisferio Occidental. También asistieron al mismo, tomando participación en sus debates y presentando trabajos personales, delegados particulares de los principales cuerpos científicos y de los institutos docentes de esas mismas repúblicas. En tal virtud, las memorias y los debates mencionados deben ser considerados como la expresión de un amplio esfuerzo científico panamericano, encerrando, por lo tanto, un valor inestimable.

El Congreso estuvo dividido en nueve secciones principales que en seguida paso a enumerar junto con el nombre de sus presidentes. Fueron las siguientes:

I. ANTROPOLOGÍA. W. H. Holmes.

II. ASTRONOMÍA, METEOROLOGÍA Y SISMOGRAFÍA. Robert S. Woodward.

III. CONSERVACIÓN DE LAS FUENTES NATURALES DE RIQUEZA, AGRICULTURA, IRRIGACIÓN Y SELVICULTURA. George M. Rommel.

IV. INSTRUCCIÓN. P. P. Claxton.

V. INGENIERÍA. W. H. Bixby.

VI. DERECHO INTERNACIONAL, DERECHO PÚBLICO Y JURISPRUDENCIA. James Brown Scott.

VII. MINERÍA, METALURGIA, GEOLOGÍA ECONÓMICA Y QUÍMICA APLICADA. Hennen Jennings.

VIII. SALUBRIDAD PÚBLICA Y CIENCIA MÉDICA. William C. Gorgas.

IX. TRASPORTE, COMERCIO, FINANZAS E IMPUESTOS. L. S. Rowe.

Estas secciones estuvieron divididas, a su vez, en cuarenta y cinco subsecciones.

De las repúblicas latino-americanas asistieron más de doscientos delegados; en tanto que las sesiones del Congreso concurrieron más de mil personas de los Estados Unidos. Los trabajos y debates del cuerpo despertaron universal interés, pues indudablemente fué aquel la asamblea científica más grande que registra la historia del Hemisferio Occidental y probablemente la del mundo. Él fué, en consecuencia, digno continuador del Primer Congreso Científico Panamericano que en 1910 se reunió en la capital de Chile y de los que previamente y con una asistencia exclusivamente latino-americana se habían congregado en Río de Janeiro, Montevideo y Buenos Aires. Su éxito fué consecuencia lógica de las asambleas que anteriormente se habían reunido en la América latina y del cordial concurso que recibió de los gobiernos y de los hombres de ciencia de esa misma parte de América.

A cuantos no quisieren limitarse a consultar los volúmenes que contienen las memorias y los debates y desearen conocer algo más de las labores del Congreso y de los resultados por él alcanzados, se les recomienda la lectura del Acta Final y de la Exposición General concerniente a la misma que escribió el Dr. James Brown Scott, Informante General del Congreso, así como el Informe del Secretario General, prepa-

rado por el suscrito y por el Dr. Glen Levin Swiggett, Subsecretario General del mismo. En estos documentos podrán hallar no sólo el Acta Final y luminosas consideraciones acerca de la misma, sino también la nómina de los delegados y de los gobiernos, sociedades e institutos docentes que tuvieron representación en la Asamblea, juntamente con una relación puntualizada de las labores de la misma. Los que deseen obtener estos volúmenes pueden solicitarlos del Director General de la Unión Panamericana en Wáshington, D. C.

Como Secretario General del Congreso deseo hacer constar una vez más, antes de concluir, el agradecimiento que en mi informe general expresé por el cordial concurso que de todos recibí para asegurar el éxito del Congreso, desde el Presidente de los Estados Unidos y usted mismo como Secretario de Estado y desde los delegados de la América Latina y de los Estados Unidos hasta los diversos funcionarios del Congreso. El gran interés desplegado por la Comisión Permanente Ejecutiva, que presidió el Sr. William Phillips, a la sazón Tercer Subsecretario de Estado; por la Fundación Carnegie para la Paz Internacional, por el órgano de su Secretario, Dr. James Brown Scott; así como la colaboración del Dr. Glen Levin Swiggett, Subsecretario General, contribuyeron poderosamente a hacer memorable la asamblea. La Unión Panamericana, institución internacional sostenida por todas las repúblicas de América y cuyo Consejo Directivo está formado por los representantes diplomáticos latinoamericanos residentes en Wáshington y por el Secretario de Estado de los Estados Unidos, contribuyó con su poderosa influencia al éxito del Congreso y me autorizó para que desempeñara las funciones de Secretario General de aquél.

Con sentimientos de la más alta consideración me subscribo

De usted muy atento servidor,

John Barrett,
Secretario General.

Al Honorable Secretario de Estado,
Wáshington, D. C.

Washington, D. C., *Le 31 mai 1917.*

Monsieur: Conformément à la recommandation du Comité Exécutif du Second Congrès Scientifique Panaméricain qui a eu lieu à Washington du 27 décembre 1915 au 8 janvier 1916, et par la coopération du Congrès des États-Unis (loi du budget extraordinaire, 8 septembre 1916), les mémoires et discussions de cette grande réunion scientifique internationale ont été recueillis et édités pour être publiés sous l'habile direction du docteur Glen Levin Swiggett sous-secrétaire général. Ce volume contient le rapport de la section IX, dont M. L. S. Rowe du Comité Exécutif était président.

Dans mon rapport officiel qui a été déjà soumis, je me suis étendu sur l'importance du Second Congrès Scientifique Panaméricain, sur le grand nombre de personnes qui y étaient présentes et sur l'excellence de ses mémoires et de ses discussions. C'est pourquoi, dans cette lettre qui, après avoir subi quelques changements sans importance, sert d'introduction à chaque volume, je n'en parlerai que d'une manière générale.

Toutes les républiques de l'Hémisphère Occidental au nombre de vingt-et-une étaient représentées au Congrès. De plus, des délégués à titre officieux envoyés par les associations scientifiques et les institutions éducatives les plus en vue de ces républiques ont soumis des mémoires et ont pris part aux délibérations. On peut donc considérer les mémoires et les discussions comme l'expression d'un grand effort scientifique panaméricain, possédant en conséquence une valeur inestimable.

Le Congrès était divisé en neuf sections principales que nous énumérons ci-dessous, en donnant le nom de leurs présidents.

I. Antropologie. W. H. Holmes.

II. Astronomie, Météorologie et Sismologie. Robert S. Woodward.

III. Conservation des Ressources Naturelles, Agriculture, Irrigation et Forêts. George M. Rommel.

IV. Instruction Publique. P. P. Claxton.

V. Génie Civil. W. H. Bixby.

VI. Droit International, Droit Public et Jurisprudence. James Brown Scott.

VII. Mines, Métallurgie, Géologie pratique, et Chimie Appliquée. Hennen Jennings.

VIII. Santé Publique et Science Médicale. William C. Gorgas.

IX. Transport, Commerce, Finance et Impôt. L. S. Rowe.

A leur tour ces sections étaient subdivisées en quarante-cinq sous-sections.

On y comptait plus de deux cents délégués des républiques latino-américaines, et plus de mille délégués des États-Unis ont assisté aux réunions. Les discussions et les procès-verbaux du Congrès ont attiré l'attention du monde entier, et il a été sans le moindre doute la plus grande assemblée scientifique internationale de l'histoire de l'Hémisphère Occidental, et peut-être même du monde entier, qui se soit réunie jusqu'ici. Venant après le Premier Congrès Scientifique Panaméricain qui s'est réuni à Santiago, capitale du Chili, en 1908, et après ceux qui ont eu lieu précédemment, respectivement à Rio de Janeiro, à Montevideo et à Buenos-Ayres, ces derniers n'ayant que des représentants de l'Amérique Latine, il s'est montré leur digne successeur. Sa réussite a été un logique résultat de ces précédents concours dans l'Amérique Latine et de la sincère et cordiale coopération des gouvernements et des hommes de science de l'Amérique Latine.

Pour ceux qui n'ont porté leur attention que sur les volumes renfermant les mémoires et les discussions, et qui désireraient connaître d'une manière plus approfondie les actes et procès-verbaux du Congrès, ainsi que les résultats qui s'en sont suivis, je leur conseillerai de lire "L'acte Final, Commentaire explicatif," rédigé sous la direction du docteur James Brown Scott, rapporteur général du Congrès, et le rapport du Secrétaire Général rédigé par ce dernier et le docteur Glen Levin Swiggett. En les lisant on n'y trouvera pas seulement l'Acte Final et le commentaire explicatif, mais encore les listes des délégués, des gouvernements qui ont participé au Congrès, des sociétés, des institutions éducatives et autres, en même temps qu'un compte rendu soigné ainsi que l'histoire du Congrès. On peut se les procurer en faisant une demande par écrit au Directeur Général de l'Union Panaméricaine à Washington, D. C.

En terminant, je vais en qualité de Secrétaire Général du Congrès exprimer de nouveau en peu de mots mes remercîments, ce que j'ai déjà fait dans mon rapport officiel pour la part que chacun a eue dans la réussite du Congrès depuis le Président des États-Unis, vous comme Secrétaire d'État, les délégués de l'Amérique Latine et ceux des États-Unis jusqu'aux employés de bureau. Le haut intérêt manifesté par le Comité Exécutif permanent présidé par M. William Phillips, qui était alors troisième Sous-Secrétaire d'État, par la Fondation Carnegie pour la Paix Internationale, par l'entremise de son sécretaire le docteur James Brown Scott, et l'aide prêté dans l'exécution par le docteur Glen Levin Swiggett, comme sous-secrétaire général, ont puissamment contribué à faire de ce Congrès un événement mémorable. L'Union Panaméricaine, administration officielle internationale de toutes les républiques américaines, et dont le Comité d'Administration est composé des diplomates latino-américains à Washington et du Secrétaire d'État des États-Unis, a usé de sa favorable influence pour assurer le succès du Congrès et m'a autorisé, en qualité de Directeur Général de l'Union, à prendre en mains les responsabilités de Secrétaire Général du Congrès.

Veuillez agréer, M. le Secrétaire d'État, en même temps que mes respectueux hommages l'assurance de mon entier dévoûment,

John Barrett,
Secrétaire Général.

Monsieur le Secrétaire d'État,
Washington, D. C.

REGISTER OF WRITERS OF PAPERS.

FOREWORD.

One of the most gratifying results of the work of the section on transportation, commerce, finance, and taxation was the widespread interest aroused in all the Republics of the American Continent in the content of the papers submitted to this section. Soon after the adjournment of the Congress the chairman of the section received a considerable number of special articles commenting on the papers submitted to Section IX, indicating that they had stimulated discussion and were having a real influence on opinion in all the Republics of America.

To those who prepared these papers the Scientific Congress, as well as a wider public, owe a real debt of gratitude. They performed a real international service—a service which will express itself in a strengthening of the spirit of cooperation between the publicists of the American Republics in the endeavor to solve the important economic, social, and financial problems confronting our American democracies.

The chairman of the section desires to take this opportunity to express a sense of personal obligation for the warm and enthusiastic support which he received from all the members of Section IX.

(Signed) L. S. Rowe,
Chairman.

SECOND PAN AMERICAN SCIENTIFIC CONGRESS.

EXECUTIVE COMMITTEE.

WILLIAM PHILLIPS, Assistant Secretary of State, Chairman ex officio.
JAMES BROWN SCOTT, Secretary, Carnegie Endowment for International Peace, Vice-Chairman.
WILLIAM H. WELCH, President, National Academy of Sciences, Honorary Vice-Chairman.
JOHN BARRETT, Director General, Pan American Union.
W. H. BIXBY, Brigadier General, United States Army, retired.
PHILANDER P. CLAXTON, Commissioner of Education.
WILLIAM C. GORGAS, Surgeon General, United States Army.
WILLIAM H. HOLMES, Head Curator, Smithsonian Institution.
HENNEN JENNINGS, former President, London Institution Mining and Metallurgy.
GEORGE M. ROMMEL, Chief, Animal Husbandry Division, Bureau of Animal Industry, Department of Agriculture.
L. S. ROWE, President, American Academy of Political and Social Science.
ROBERT S. WOODWARD, President, Carnegie Institution of Washington.

ORGANIZATION OFFICERS.

JOHN BARRETT, Secretary General.
GLEN LEVIN SWIGGETT, Assistant Secretary General.

SECTION IX.—TRANSPORTATION, COMMERCE, FINANCE, AND TAXATION.

L. S. Rowe, Chairman.

COMMITTEES.

Subsection 1.—*Transportation.*

James S. Harlan, Interstate Commerce Commission, Washington, D. C., Chairman.
Balthasar H. Meyer, Interstate Commerce Commission, Washington, D. C.
Emory R. Johnson, University of Pennsylvania, Philadelphia, Pa.
L. S. Rowe, University of Pennsylvania, Philadelphia, Pa.

Subsection 2.—*Commerce.*

S. N. D. North, Assistant Secretary, Carnegie Endowment for International Peace, Washington, D. C., Chairman.
David Kinley, University of Illinois, Urbana, Ill.
Jeremiah W. Jenks, New York University, New York City.
John Bates Clark, Columbia University, New York City.
Edwin F. Gay, Harvard University, Cambridge, Mass.
L. S. Rowe, University of Pennsylvania, Philadelphia, Pa.

Subsection 3.—*Finance.*

Jacob H. Hollander, Johns Hopkins University, Baltimore, Md., Chairman.
George E. Roberts, National City Bank, New York, N. Y.
Edwin W. Kemmerer, Princeton University, Princeton, N. J.
Carl C. Plehn, University of California, Berkeley, Cal.
L. S. Rowe, University of Pennsylvania, Philadelphia, Pa.

Subsection 4.—*Taxation.*

Edwin R. A. Seligman, Columbia University, New York, N. Y., Chairman.
Samuel T. Howe, Tax Commissioner, State of Kansas, Topeka, Kans.
Carl C. Plehn, University of California, Berkeley, Cal.
Charles J. Bullock, Harvard University, Cambridge, Mass.
E. Dana Durand, University of Minnesota, Minneapolis, Minn.
T. S. Adams, Yale University, New Haven, Conn.
Lawson Purdy, Department of Taxes and Assessments, New York, N. Y.
William H. Corbin, Tax Commissioner, State of Connecticut, Hartford, Conn.
L. S. Rowe, University of Pennsylvania, Philadelphia, Pa.

SECOND PAN AMERICAN SCIENTIFIC CONGRESS.

AIMS AND PURPOSES.

The congress, in accordance with its high aims and purposes, namely, to increase the knowledge of things American, to disseminate and to make the culture of each American country the heritage of all American Republics, to further the advancement of science by disinterested cooperation, to promote industry, inter-American trade and commerce, and to devise the ways and means of mutual helpfulness in these and in other respects considered the following general program of subjects, divided into appropriate sections and subsections.

SECTION IX.—TRANSPORTATION, COMMERCE, FINANCE, AND TAXATION.

TRANSPORTATION.

The regulation of public utilities. The improvement of transportation facilities by means of—inland waterways, motor railroad cars, and motor-driven vehicles, aeroplanes, and air-propelled gliding boats.

COMMERCE.

Feasibility of establishing uniform methods, documents, statistics, port charges, administrative regulations, and classifications in international trade between the North, Central, and South American countries; the effects of the European war upon the commerce of the American Republics; possibility of standardizing commercial and census statistics in the American Republics; reviews of the natural resources, commercial and economic development of several of the South and Central American Republics; reciprocity in patent practice; possibility of ratifying the Buenos Aires Trade-Mark Convention of August 20, 1910.

FINANCE.

The investment of foreign capital; extension of credits; possibility of establishing a common monetary unit as between the Republics of America; effects of the European war upon the finances of the Latin-American countries; quotation of Latin-American municipal and State bonds in United States markets and exchanges.

TAXATION.

The scientific study of taxation systems; desirability of establishing other revenue-producing taxes than those based on the consumption of alcoholic beverages.

RESOLUTIONS AND RECOMMENDATIONS.

The Second Pan American Scientific Congress considered and discussed the subjects set forth in its program in the light of an intellectual Pan Americanism in a series of meetings from December 27, 1915, to January 8, 1916, and adopted resolutions and recommendations pertinent to the work of the nine main sections of the congress.

The following recommendations refer to Section IX:

Article 5.

The Second Pan American Scientific Congress recommends that proper steps and measures be taken to bring about in the American Republics a general use of the metric system of weights and measures, in the press, magazines, newspapers, and periodicals, in educational and scientic work, in the industries, in commerce, in transportation, and in all the activities of the different Governments.

Article 42.

The Second Pan American Scientific Congress recommends that there be established throughout the American Republics uniform methods, in the presentation of statistics, in the classification of merchandise and in the manufacture thereof, in the standard of weights, measurements, and tests, in nomenclature and specifications, in administrative customs regulations, and in the schedules of port charges; provision be made for the collection and study of the data thus made available, through some organization which will assure a thorough and scientific comparative study of the questions involved.

Article 43.

The Second Pan American Scientific Congress deems it advisable that the American Republics agree upon a uniform date for the taking of the census, and that uniform methods be adopted in the collection, arrangement, and presentation of commercial and demographic statistics.

Article 44.

The Second Pan American Scientific Congress is of the opinion that it is highly desirable to make a scientific study of the systems of taxation existing in the different American Republics.

ARTICLE 45.

The Second Pan American Scientific Congress urges that the American Governments, deriving important revenues from the consumption of alcohol, organize their systems of taxation in such manner that their economic interests be subordinated to the higher interests of a social and moral order, which tend to the suppression of alcoholism.

ARTICLE 46.

The Second Pan American Scientific Congress deems it desirable that the monetary systems of the American Republics be subjected to careful scientific study, with a view to making the experience of each available to all.

FIRST GENERAL SESSION OF SECTION IX.

TRANSPORTATION, COMMERCE, FINANCE, AND TAXATION.

NEW WILLARD HOTEL,
Tuesday morning, December 28, 1915.

Honorary Chairman, ERNESTO QUESADA.
Chairman, JACOB H. HOLLANDER.

In the absence of Dr. L. S. Rowe, chairman of the section, the session was called to order at 10 o'clock by Prof. Jacob H. Hollander, of Johns Hopkins University, Baltimore, Md., chairman of the subsection on finance.

Mr. HOLLANDER. Gentlemen of the Pan American Scientific Congress, it is my unfortunate and unexpected task, in view of the illness of Dr. Rowe, to be obliged to call to order the section over which he should have presided.

My service is in the main perfunctory, and yet I should be false to the traditions of academic office if I did not embrace the opportunity which has thus come to me to express at least a single sentiment, i. e., the satisfaction felt by those of us who have devoted our lives to the subject matter embodied in the program of Section IX that in a congress devoted to learning there should at last be given full and equal place to the group of subjects included in such titles as "commerce," "transportation," "finance," and "taxation," for it is, of course, a new thing for the scientific importance of these subjects to be recognized.

The British Association for the Advancement of Science, for example, has only within our own memory given reluctant recognition to economic matters. Even the American Association for the Advancement of Science has allowed but a partial place to economic and financial subjects. The explanation lies, of course, in the comparative modernity of the phenomena that are thus subject to scientific study. Transportation is a matter of our own day; commerce existed from time immemorial as a fact, but it was only Adam Smith who insisted that the subject matter of commerce was capable of scientific study. Finance, too, has been practiced, but not always studied; and taxation is only now entering upon the stage where it is anything more than the task of plucking the goose.

But certainly here in our own time we have come into full scientific possession of these subjects; and it is a matter of profound congratulation that the Americas should, early in the history of their scientific assembly, recognize that just as the natural sciences afford opportunity for those who in the various countries are consecrating their lives to the study of this subject matter to come in contact for conference and discussion, so the problems which have to do with the affairs of men engaged in the process of getting a living, as some one has defined political economy, require contact.

Finally, I think I will not be deemed guilty of usurping the prerogatives of the chairman of the section if I express the satisfaction which, I am sure, Dr. Rowe would have voiced that we are honored by the presence of an eminent cabinet minister, a man whose presence, I like to think, is not as a representative of the Government, but as a fellow scientist, for surely in that company of students who have filled the office of the Secretary of the Treasury, Mr. McAdoo's name will hereafter live, it seems to me, with the names of his great predecessors, Hamilton and Chase, as one who has brought to the solution of the most acute financial problems which our Republic has faced in the century and a half of its existence not only the adeptness and skill of a man of affairs but the profound thought and large vision of a scholar and of a scientist. His presence, then, it seems to me, is as one of us as well as a distinguished representative of the Government.

With these brief remarks, I deem it my privilege to turn over the further conduct of the session to Dr. Ernesto Quesada, chairman of the Argentine delegation.

Mr. QUESADA. Gentlemen, I fully appreciate the kindness of the committee in charge of this section in doing me the honor of selecting me as president *pro tempore* of the session to-day. I take it as a tribute to my country, the Argentine Republic, and, I may add also, to our National University at La Plata, where I hold the professorship of political economy.

I thank you very sincerely for the honor which you have conferred upon me. It is my most agreeable duty to ask Hon. William G. McAdoo, Secretary of the Treasury, to deliver the address of welcome.

ADDRESS OF WELCOME.

By Hon. WILLIAM G. McADOO,
Secretary of the Treasury.

Gentlemen of the Pan American Scientific Congress:

It would be difficult to imagine a more opportune moment for the assembling of this congress. At a time when the great nations of Europe are engaged in a colossal conflict of destruction it is an inspiring thought that the Republics of America should assemble upon the soil of this country, which is dedicated to the ideals of freedom, independence, and peace, to take counsel with one another as to the best means of solving their economic, financial, and industrial problems, and lending, as far as possible, the influence of their counsel and example to the preservation of peace in the Western Hemisphere, and the promotion of peace throughout the world. The spirit of mutual helpfulness should be the keynote of this congress, and the practical application of this spirit should result in a new epoch in international relations, an epoch in which cooperation will take the place of jealousy and antagonism.

As Secretary of the Treasury I have special reason to welcome you, because I understand that there are among you many of the leading experts and students of financial problems of this continent. I am constantly faced with many questions of a highly technical nature and the counsel and advice of experts are not only helpful but indispensable. One of my chief difficulties comes from the fact that I frequently have to deal with questions upon which every person, no matter what his qualifications or lack of qualifications, feels that he is prepared to express an authoritative opinion. In our democracies, where all kinds of problems are tested by the standards of public opinion, a particularly grave responsibility rests upon experts such as you to enlighten and guide public opinion in order that the right solution of these important problems may be found.

The European war has forced upon all the nations of the world acute, unexpected, and novel financial questions, necessitating readjustments in many instances of national finances and compelling the adoption of new expedients. It is altogether possible that out of the emergencies thus created permanent benefits may be derived through the development of better organization and more consistent fiscal

systems throughout the Western Hemisphere. Whether this results or not depends in large measure on the intelligent leadership and constructive capacity of men like yourselves, who are giving so much time, thought, and energy to the careful study of these vital problems. In the matter of public finance all the Republics of the American Continent have much to learn from one another, and I hope, as I confidently expect, that as a result of the interchange of experience and the faithful observance of common ideals, this congress will be able to give a new impulse and a wiser guidance to the financial administration and fiscal policies of the Republics of America.

Permit me to wish you abundant success in this patriotic work and to express my own sense of obligation for the self-sacrificing loyalty and commendable enterprise which impel you to this inspiring service.

In May, 1915, a notable conference was held in the city of Washington—the first and only Pan American Financial Conference. All of the Republics of the Western Hemisphere, with the exception of two which were at that time unhappily disorganized by internal dissensions, were represented in that conference. It was called by authority of the Congress of the United States and it was the honor and privilege of the Secretary of the Treasury to preside over its sessions. The distinguished representatives of all the South and Central American Republics were joined by a body of the leading financial and business men of the United States. The deliberations of that conference have already resulted in practical benefits of far-reaching importance, and the work then initiated and now being carried forward with enthusiasm and diligence will, I am sure, be productive of even greater benefits in the future. I am delighted that a section of this scientific congress is going to devote its best thought to some of the problems considered by the Pan American Financial Conference. Out of frequent discussions of this character, participated in by men of high purpose and practical intelligence, come that kind of fruitful cooperation which removes mountains of difficulties, dispels clouds of prejudice, and builds enduring structures. It seems as if the very horrors of war in Europe had compelled destiny to turn an appealing and benevolent face to the Western Hemisphere. We must not be insensible to that appeal. We must seek to bring about such a consolidation of moral and material influence among the Nations of America as will make them irresistibly potential in peaceful and helpful service to humanity and civilization.

Let me welcome you and wish for you a delightful association and communion with each other, and a substantial and honorable achievement in the great field upon which you have entered.

Mr. QUESADA. Gentlemen, I think that you will all be of the same opinion with me that the remarkable address to which we have just listened has been entirely too short.

May I venture now to invite one of the most distinguished among you here, the former Ambassador of Mexico to Washington, Dr. Joaquin D. Casasús, to say a few words in response to the address of the Secretary of the Treasury?

Mr. CASASÚS. Mr. Chairman, Mr. McAdoo, Ladies and Gentlemen: It is with the greatest pleasure that I accept the invitation to answer the address of welcome of the Secretary of the Treasury, Mr. McAdoo. If I expect to be the interpreter of your ideas and your sentiments about him, it is because I know that I am going to express my own ideas and my own feelings about this great statesman who has honored us to-day in coming to welcome us.

Everyone of us knows perfectly well Mr. McAdoo. He is one of the extraordinary men of America of whom he has just spoken. He has applied—I will not dare to say for the first time—but he is now applying scientific principles to the work that he has been carrying on in the Treasury Department of the United States of America. He showed to us the great interest which he has in Pan Americanism by calling, as you know, the Financial Conference which was held in Washington some months ago. He knows perfectly well all the problems which have been submitted to our study; he knows perhaps better than anyone else the manner in which they can be studied and in what way it is possible to realize all the ideals of Pan Americanism in America. It is indeed a pleasure, Mr. McAdoo, for me, in the name of Section IX of the Second Pan American Scientific Congress, to express to you our high appreciation of your coming to welcome us and to voice the hope that great and beneficial results will follow the performance of the tasks to which we have set our hands.

The CHAIRMAN. Prof. Hollander will now make an announcement in regard to the organization of the section.

Mr. HOLLANDER. The plan of Section IX, as most of those present know, requires a division of the work of the section into four subsections, dealing respectively with transportation, commerce, finance, and taxation. Preliminary to the program of detailed papers in each subsection there will be a discussion by the entire section of one topic proposed in turn by each subsection and designated as the Pan American topic. Thus this morning the discussion will be in regard to the Pan American topic proposed by the subsection on transportation, and in succession during this week at the meetings as announced the Pan American topics in each of the four subsections will be considered. This will be in addition to the meetings, or,

at least, largely in addition to the meetings which are to be held jointly by Section IX of the congress and the American Economic Association, which is in session in Washington during the same days, and which has arranged its program so as to have a common meeting. It seems to me that this is one of the most fortunate incidents of our congress, that there have been brought together not only our own company but another representative body of scholars and men of affairs engaged in economic study.

This will, in addition to the engagements, social and otherwise, prepared for the congress, exhaust the first week. On Monday the detailed meetings of the subsections will take place, and here, owing to the necessity of time, there must be simultaneous meetings; in other words, each of the subsections will meet Monday morning, Monday afternoon, Tuesday morning, Tuesday afternoon, Wednesday morning, and Wednesday afternoon.

For further particulars I trust the members of the section will consult freely the secretary of the section, Mr. H. N. Branch, and the general officers of the congress on the ground floor of the hotel.

The general topic at present is "The Relation of Central to Local Control in the Regulation of Public Utilities." Judge Prouty, who was scheduled to make an address on this topic, is unable to be present, but Mr. C. F. Staples, who is associated with him, will read his paper.

Mr. Staples. Mr. Chairman and gentlemen, it is to be regretted that Judge Prouty is unable to be present and discuss this topic this morning, but his absence is unavoidable, and I have been requested to read what he would have said. His paper is as follows:

REGULATION OF PUBLIC UTILITIES.

By CHARLES A. PROUTY,
Director of Valuation, Interstate Commerce Commission.

The discussion of this subject will be confined to the United States alone, and will be addressed to three aspects—

1. The reason for regulation.
2. The means employed.
3. The extent and success of the experiment.

(1) The public utilities of the United States are for the most part provided by private capital. While public ownership exists to a limited extent, it has never gained a considerable foothold in this country except in the furnishing of water for domestic uses. When the Government "regulates" the utility it takes away from the proprietor the control of his property. The love of personal freedom; the right to do with his own what he will is peculiarly dear to the American citizen. By virtue of what principle, then, is the Government permitted to lay its hand upon this species of property and take from its owner the right to control its use?

Various reasons have been alleged by courts and economists.

It has been said that the Government might itself build and operate these utilities, as, for example, our railroads, and that, therefore, it may control. But does the conclusion follow? Granted that the Government may do this thing; nevertheless, it has elected not to do it. It has permitted and invited private property to enter upon the discharge of this function. Should it not in justice leave this private property untrammeled?

It is urged that the agency which provides the utility is a corporation, the creature of the Government; and that, therefore, the Government, that is, the creator, may impose whatever conditions it sees fit upon the creature. Assuming that the Government might at the time of the creation impose whatever limitation it saw fit, should it, after the corporation has begun business without restriction, then for the first time fix the conditions? And again, taking our railroads as an illustration, the corporation which transacts the business is a creature of the individual State, while the majority of that business is regulated by the Federal Government.

It is said that the corporation in its operations is given the right of eminent domain and that since it is allowed to condemn the property of others in the discharge of its function, so its own property may be controlled, but here again the right of condemnation is by no means universal. In some States water companies, gas companies, electric-light companies, can not take *in invitun* the lands or water rights of others which may be needed in the development of their plants, although their rates may be fixed by public authority.

The reason is broader than all this. It is founded upon public interest. These so-called public utilities are essential to the proper development of modern society. Society could not live and act in these days without the railroad, the telephone, the electric service, a proper water supply. The furnishing of these necessities is essentially a monopoly. The individual is helpless to protect himself against the corporation, therefore, society must protect him. The right of regulation rests upon the broad principle that the State must of necessity have authority to develop its activities and safeguard its citizens. This right should not clothe injustice, but without the right the State itself could not exist. In most countries this right would be exercised as a matter of course; in this land of ours the attempt to regulate provoked bitter denunciation and the right itself was only established after long controversy before legislature and court.

(2) In discussing the means to be employed, we should always keep in mind the thing to be accomplished. That thing is the protection of the public, the protection of the individual who must patronize the utility, and this individual is interested in two respects.

First comes the service. The utility is a thing of necessity and that necessity is not supplied unless the service be adequate. If the utility be a gas company, then its gas must be of proper quality and furnished under proper pressure. If it be a street railway, its schedules must accommodate the public. If the steam railroads of this country are considered, then their means of transportation must be adequate to handle the traffic both of freight and of people which is offered. Indeed, it is probable that the service is of the greatest immediate consequence, since, by the want of adequate service, the patron is incommoded and damaged. If the railroads of our land were unable for a considerable time to handle the business presented, the commerce and the industry of this nation would languish.

The other thing in which the public is interested is the rate; that is, the amount which the patron is required to pay for the service. And here, again, the

rate may be improper for two reasons. It may be absolutely too high; that is to say, it may be more than the utility ought to charge.

It was formerly said by most people, in discussing this subject, that the utility was really a seller of the commodity which it produced, that the user was a buyer of that commodity, and that the price ought to be governed, like the price of other commodities, by the law of supply and demand. It was, therefore, just as foolish and improper to attempt to fix the rates of the utility as it would be to fix the price of a commodity. But it long since became evident that this is in no sense true. There is no element of bargain and sale in this transaction. The patron must use, must obtain the thing used from this particular source, and he can obtain it from no other source. He must, therefore, pay the price which is required of him. Upon reflection it will appear that the rate charged by the utility is much more closely analogous to a tax which is imposed upon the user. The rate may also be a source of discrimination and, therefore, unjust even though not inherently too high. It could be easily shown that the freight rates imposed by the railroads of this country may, and in the past have, actually determined where cities shall be built, where business shall be transacted, and by what individuals that business shall be done.

These are the aspects which concern the patron of the utility. There is still a third aspect in which the entire community is indirectly interested.

The amounts involved in the rates of most public utilities are insignificant when applied to a single unit. The issue is generally a few cents per thousand feet of gas or per kilowatt hour of electricity or per hundred pounds of freight. But the gross amounts are enormous. The total operating revenues of the railroads of the United States for the year ending June 30, 1914, were in excess of $3,000,000,000. One cent per ton applied to the total tonnage handled by these same railroads for that year would amount to almost $19,500,000. This species of property tends more than almost any other to add to and perpetuate itself. The individual piece of property wears out and is thrown away, but the property of the utility as a whole continually grows. There is a constant disposition to increase the value of the property from the earnings of the property itself. It appeared in what is known as the Eastern Rate Advance Case before the Interstate Commerce Commission that the Pennsylvania Railroad had invested in its lines east of Pittsburgh during the 10 years preceding 1909, $110,000,000 out of its earnings. It had been long the policy of that company to invest in the property out of its collections from the public an amount equal to that paid its stockholders in dividends. A moment's reflection will show that if these public utilities are allowed to pay their stockholders an adequate sum for the use of the money invested and to put into their property for the benefit of these same stockholders an equal amount; if to this be added the increment in the value of their lands, we have an ever-increasing snowball, insignificant at the outset, but which may finally become an avalanche.

For these reasons it is essential to the just protection of the community that the rate charged by the utility shall be reasonable. It is just as essential, for reasons to be pointed out later, that this rate shall be fair to the utility itself.

What means have been employed to effectuate these purposes, i. e., to secure a proper service for a proper charge?

The American citizen, as already suggested, loves individual freedom. While he has no very definite idea of what the word means, paternalism is highly offensive to him. He will endure a considerable amount of inconvenience from others rather than submit to the adoption of methods which put any real constraint upon his own activities. The disposition of such a people is to interfere as little as possible with the management of private property. Such a people would naturally lay down general laws determining the conditions under which

property might enter upon the discharge of these quasi-public functions, leaving to the courts the enforcement of these laws when violated. And this was exactly the method employed at the outset and persisted in for a considerable time both in England and in this country. Statutes were enacted prohibiting discrimination and the charging of unreasonable rates. If these statutes were violated, the aggrieved party was remitted to the courts, where he might recover damages for the wrong inflicted upon him. It soon became evident that this method of procedure did not in fact accomplish its purpose. The amount involved, to the individual who paid the rate or suffered from the discrimination, in a single case was usually small, while the total amount involved, to the utility, was large. The individual could not afford to prosecute to a final judgment a suit for damages, and, in point of fact, while complaints against unreasonable and discriminating rates were universal, such suits were but rarely begun.

Again, the damages which were recovered looked only to the past and not to the future and were awarded only in favor of the individual bringing the suit. If a railroad company were convicted of having charged an exorbitant rate and compelled to refund in some few instances, there still remained in its treasury the great bulk of its improper gains. As time went on it became evident that the only way in which to secure substantial protection for the public was to prescribe the service which the utility should render and the rate at which that service should be rendered and to compel the observance of this requirement. In that way justice was secured without favoritism for the entire public, and in no other way could this be accomplished.

The various utilities bitterly resisted all attempts to apply this idea both before legislatures and in the courts. The outcome after years of discussion and court decision is this:

1. The Government may fix the measure of service and the rate at which that service shall be rendered, and may compel the utility to observe this order.

2. Under the Federal Constitution and under the constitutions of most States the functions of government are divided into legislative, executive, and judicial, and those functions which properly pertain to one branch of the Government can not be exercised by any other. It has been held that the regulation of public utilities by prescribing their rates and practices is a legislative function which can not be delegated to the courts. The legislature may exercise this right either directly or by the appointment of a commission which, within the limits of its power, may exercise the same authority.

3. The courts can not review or modify the act of a legislature in this behalf nor the order of a legislative commission, provided that the commission acts within its delegated authority and provided that the requirement, whether by legislature or commission, is not, for want of a better word, confiscatory.

The machinery of regulation is being worked out under the foregoing principles. In many cases legislatures have determined by statute matters connected with the construction and operation of a utility, as, for example, what sort of headlight shall be used upon a locomotive or what shall constitute a train crew. Statutes have also been passed prescribing the rate at which freight and passengers shall be carried. The legislature might, if it saw fit, proceed in this way with all public utilities; but, in point of fact, that method would be an extremely cumbersome one, and the usual plan at the present time is to create a legislative commission to which is given in more or less complete degree the power of regulation. Such a commission usually has authority to make orders within prescribed limits, and these orders when made are either self-executory or will be enforced by mandatory process of the courts. The

courts, as already said, have no power to modify the order, although they may under certain conditions set it aside.

The Federal Government and most States have created commissions of this kind. The powers of many of these commissions, including the Federal commission, are still incomplete, but the tendency is to give to such commissions full authority over all the activities of the utility. They may control the issuing of its securities and, therefore, its development; may prescribe the standards by which it shall be constructed; may determine the rules under which it shall be operated and the rates which it may charge. It is evident that a commission of this kind possessed of these powers has the needed authority to completely safeguard the interests of the public.

(3) In determining the measure of success which has attended Government regulation of public utilities up to the present time, the thing aimed at must still be kept in mind. That thing is the good of the public. The Government, itself, might render for its citizens the services which are rendered by the public utility. While this is no discussion of Government ownership, still there must be some standard by which the test of success is to be applied, and the inevitable question in the minds of all people must be, Can the Government obtain as favorable results by regulation as it would obtain if it rendered the service itself?

It will be remembered that there are two points at which the patron of the utility is affected—the service which is rendered and the price which is charged. So far as the service is concerned the regulating commission has or may have the most perfect control. Take for illustration the street railway. It can prescribe the kind of cars to be used, the sort of track upon which those cars shall be run, the frequency with which and the speed at which they shall be operated. Every item which enters into the rendering of that service for the public is under the control of the regulating tribunal.

And this is true of all utilities. The Government may fix the standards of construction and determine the conditions of operation. It can impose upon the utility by its orders whatever it might itself do if it were actually rendering the service. And if the order be not obnoxious as an excess of authority or in violation of constitutional limitation, the utility can be compelled to obey its requirement.

The next thing is the rate, and here the control of the Government is even more complete than with the service. To-day most utilities are required to publish for the information of the public the rates to be charged for the performance of their services, and are not permitted to collect different rates, under heavy penalty. While the utility is generally allowed to make its own charge in the first instance, that charge is subject to alteration by the commission. The Government may, in effect, fix the rate which the utility receives. If the sole purpose be to protect the patron of the utility or the general public against abuse, the Government can exercise the same restraining influence through regulation as though it operated the utility itself.

But there is a reverse side to this protective shield. A given service can not be rendered unless the utility possesses adequate means to the end. Freight can not be transported without cars and engines. The Government may order the utility to provide itself with those facilities which are needed for the rendition of the service, but it can not compel this unless that utility has the money with which to procure what is needed. When the utility is operated by private capital, this money must come from private investment, while the Government can provide by taxation, if necessary, the needed means. No law can force private capital into investment in a public utility. If, therefore, under Gov-

ernmental regulation the utility can not obtain the necessary funds with which to maintain and develop its property in such degree as to meet the demands upon it, the service must be impaired.

This is the point at which regulation will break down if at all. Can private capital be induced, under the treatment which is accorded that capital by the regulating body, to invest? If Government ownership ever comes in the United States it will probably be because private capital can not be obtained in sufficient amounts to afford an adequate service.

Up to the present time such has not been the case. The large amounts of private capital which are invested in public utilities are of little value except in the operation of the utility itself. If, therefore, the Government directs a railroad to do a certain thing, the property invested in that railroad must, in self-protection, obey that order. This will be done until the credit of the company has been exhausted. Effective and comprehensive regulation is of recent date and its final effect upon the investing public has yet to be demonstrated by actual experience.

Up to the present time in this country regulation has resulted in much benefit to the public. Facilities and service have been distinctly improved, and there is no reason why the beneficent effect in these particulars should not continue. Rates have been reduced. The tendency is that way. The public, which pays the rate and which has little idea of what a reasonable rate is, naturally desires to pay less. The commission which decides is inevitably influenced by public sentiment. Can rates be advanced as well as reduced? Until that question is answered the success of regulation can not be assured, for an adequate service must be had; that service can not be provided without adequate means and the money can not be obtained from private investors unless a sufficiently attractive return is assured.

What this rate of return must be will depend upon the kind of utility and the conditions surrounding it, but in all cases it must be distinctly higher than the rate at which the Government, itself, could borrow the money invested in the utility. Whether the Government can afford to regulate will be the final inquiry. Up to the present time the experiment of regulation has hardly gone far enough to determine its ultimate success.

The CHAIRMAN. We have listened with the utmost interest to this very important paper. This is a very interesting question and really ought to be discussed in full, because, as you know, the solution of these problems depends largely on the point of view the student may take, whether that of individualism or that of a certain form of communism. For instance, let us say in this most extraordinary conflict of the present moment you can see on one side, on the side of England, for example, the idea of individualism held uppermost, while on the other side, that of Germany, the principle of the community is maintained; so that they have solved their different problems in diverse ways according to their absolutely different standpoints.

We must, however, pass from this topic to the next subject, on which Dr. Casasus has a paper to read. I invite him to the platform to read his paper.

LA MONEDA INTERNACIONAL.

Por JOAQUÍN D. CASASÚS,*
Ex-Embajador de México en los Estados Unidos de América.

Crear una nueva moneda internacional que desempeñe el oficio de moneda en todos los países o uniformar los sistemas monetarios existentes, ha sido una general aspiración de filósofos y de pensadores, de economistas y de financieros, de publicistas y de hombres de Estado.

Todos han comprendido que nada podría ser más útil ni nada podría convenir más a los comunes intereses de los pueblos que simplificar sus transacciones recíprocas, haciendo uso de una sola moneda igual para todos.

La unificación de los sistemas monetarios, tras de estimular el desarrollo del comercio y promover el bienestar general de las naciones, podría producir facilidad en los cambios, economía de tiempo y de trabajo en las operaciones comerciales y evitar la refundición frecuente y constante de las monedas y los perjuicios que ocasiona el tráfico a que ellas dan lugar.

Pero ¿son de posible realización estos beneficios o, lo que es lo mismo, es hacedero que las naciones lleguen a adoptar una moneda común o a unificar sus sistemas monetarios?

La historia de la moneda internacional comprueba de manera inequívoca que esta idea generosa, que este noble esfuerzo, que este fascinador ensueño es de imposible realización.

Se han reunido por doquiera congresos y conferencias para ahondar por modo profundo el problema monetario internacional; se han llevado a cabo negociaciones privadas y diplomáticas para analizar, en forma concreta y precisa, los obstáculos que crea la unificación de los sistemas monetarios y se han verificado discusiones amplísimas que han arrojado viva luz acerca de las ventajas y de las desventajas que en cada caso particular pueden presentarse, al procurar que cada nación se prepare a adoptar una moneda internacional; pero a pesar de todo puede decirse que nada se ha adelantado, que no se ha dado paso alguno digno de ser considerado como eficaz y que, a pesar de reconocerse los indiscutibles beneficios que se derivan de la unificación de los sistemas monetarios, cada nación conserva y conservará el suyo, porque son los sistemas monetarios el resultado de las tradiciones seculares de los pueblos.

Desde un punto de vista meramente teórico y tomando únicamente en cuenta la naturaleza de las cosas, fuerza es convenir en la imposibilidad de llegar a una solución favorable en lo que se refiere a la unificación de los sistemas monetarios o a su modificación adoptando una nueva moneda internacional.

Los sistemas monetarios no son la obra arbitraria de los gobiernos que los establecen ni de las leyes que les dan fuerza obligatoria, sino el resultado de una labor lenta y secreta que cada pueblo ha llevado a cabo en las luchas de su industria y de su comercio. Los sistemas monetarios son conjuntos armónicos que, al fijar la unidad monetaria y el metal con que debe fabricarse y las monedas que han de acuñarse y el poder liberatorio que debe atribuírseles resumen la historia comercial, pues en esa armonía se hermanan las costumbres y las tradiciones, los errores y los aciertos, las vicisitudes y las prosperidades, todo un pasado más o menos glorioso que vincula el esfuerzo para asegurar la supremacía mercantil.

Las grandes y poderosas naciones, lo mismo que las pequeñas y las pobres, se apegan con fuerza incontrastable a sus sistemas monetarios y rehusan alterar

* Fallecido el 25 de febrero de 1916, en Nueva York.

las bases fundamentales que los sostienen, porque las necesidades y los intereses de los pueblos que las constituyen no varían, obedeciendo a ideales más o menos levantados, pero ideales al fin tan generosos como tan quiméricos.

Si la demostración teórica es fácil, porque de suyo la formula y precisa la naturaleza e índole de los sistemas monetarios, más fácil es todavía llevar a cabo la demostración histórica, porque la historia monetaria hace ver que ha sido vano el esfuerzo de los gobiernos y el de sus hombres de Estado para obtener que las naciones se presten a modificar sus sistemas monetarios existentes a fin de llegar a la unificación de la moneda.

No han faltado, por parte de las naciones más civilizadas del mundo, iniciativas y sugestiones, reuniones y congresos y conferencias para dilucidar el asunto, salvar obstáculos y vencer dificultades; pero los resultados no han correspondido a los esfuerzos impendidos.

Los Estados Unidos de América, debe decirse en honor suyo, fueron los primeros que en 1857 formularon varias proposiciones para la asimilación de su sistema monetario con el de la Gran Bretaña.

En cumplimiento de una ley del Congreso, aprobada por virtud de un informe de la Comisión de Hacienda del Senado, fué enviado a Washington el Profesor J. H. Alexander, autor de un folleto intitulado "International Coinage for Great Britain and the United States," con el objeto de procurar el establecimiento de una moneda común para los dos países; pero después de varias conferencias la misión fracasó, porque la Gran Bretaña se negó a modificar su ley monetaria de 1816 y con ella su libra, su chelín y su penique.

En su Informe de Diciembre de 1862, el Secretario Chase llamó la atención del Congreso hacia la importancia de uniformar los pesos y medidas y recomendó que la media águila americana se acuñase exactamente igual a la libra esterlina, en peso y ley.

En los años de 1860 y 1863 se celebraron, primero en Londres y después en Berlín, reuniones internacionales con el propósito de discutir la posible unificación de las monedas de las principales naciones de Europa y la uniformidad de los pesos y medidas. Los estudios llevados a cabo en el Congreso de Berlín deben considerarse como los de mayor importancia, pues si es verdad que no se llegó a resultado práctico alguno, tal vez jamás se ha presentado en forma más clara lo que más tarde ha llegado a servir de base para los sistemas monetarios, esto es, la superioridad del oro para fabricar con él la unidad monetaria, estimándose la plata como el metal a propósito para la moneda subsidiaria, y nunca como entonces se concibió un proyecto para unificar por medio de modificaciones los sistemas monetarios entonces existentes.

El Congreso Estadístico Internacional de Berlín de 1863 aprobó las siguientes resoluciones:

I. Que el Congreso recomienda que las unidades monetarias existentes se reduzcan a un pequeño número; que cada unidad se divida, en tanto que sea posible, según los principios del sistema decimal; que las monedas en uso se acuñen siguiendo el sistema métrico y la ley y el peso se expresen de acuerdo con él, a saber: 0,900 de fino y 0,100 de liga.

II. Que se invite a los diversos Gobiernos para que envíen Delegados a un Congreso especial que estudie e informe acerca de cuál debiera ser el peso relativo de las monedas de oro y plata, arregle los detalles por los que los diferentes sistemas monetarios de los diversos países habrían de establecerse de acuerdo con las precedentes proposiciones.

En 1867, con motivo de la Exposición Universal de París, se verificaron bajo los auspicios del Gobierno francés una Conferencia internacional para discutir los principios generales y las conveniencias que podrían resultar de la adopción

de una moneda internacional, y una Conferencia diplomática que se reunió en el Ministerio de Negocios Extranjeros, para ver si era posible que las demás grandes potencias se adhirieran a la Unión Latina de 23 de Diciembre de 1865, introduciendo los cambios necesarios e indispensables en sus sistemas monetarios.

Ni una ni otra produjo resultado alguno satisfactorio.

La Conferencia de 1867 fué un brillante torneo científico, en el que se analizó el problema de la adopción de una moneda internacional y el informe del gran ministro francés, Monsieur Parieu, en ella presentado, constituye un admirable resumen del asunto; pero no hizo avanzar en lo más mínimo la esperada solución de la creación de la moneda internacional.

La Conferencia diplomática de 1867, por la forma en que fué convocada y por la manera de llevar a cabo sus trabajos, hizo ver de modo muy perceptible la imposibilidad de darle mayor extensión a la convención monetaria ajustada en 23 de diciembre de 1865, entre la Francia, la Bélgica, la Suiza y la Italia; porque puntualizadas, por ejemplo, las modificaciones que la Gran Bretaña y los Estados Unidos podrían hacer en sus leyes monetarias para entrar en el régimen de la convención latina, ellas ponen de relieve que jamás los Gobiernos modificarán su legislación, aun en puntos que no son fundamentales, si las modificaciones exigen lastimar las tradiciones, los intereses o aun las preocupaciones de sus pueblos.

Dos fueron las resoluciones principales adoptadas por la Conferencia: I. La primera en favor de la adopción universal del oro; II. La segunda en favor de la adopción de la pieza de oro de cinco francos, como tipo representativo de la unidad universal o base del nuevo sistema monetario internacional, considerando como el mejor sistema el francés del franco.

Un pequeño sacrificio se exigió de la Gran Bretaña para que hubiera de someterse a las resoluciones anteriores, a saber: reducir el valor de la libra esterlina, de Francos 25–2215 a 25 francos, o, lo que es lo mismo, una reducción de 0.88 centésimos por ciento en su valor. Esta reducción habría de afectar sin duda el cumplimiento de los contratos ya celebrados y los pagos todos que debían hacerse en las viejas libras esterlinas; pero no era imposible poner remedio a esas dificultades, sobre todo porque la diferencia señalada afectaba tan sólo el valor legal de la libra, y nó su valor en el mercado, esto es, el de las libras acuñadas existentes en la circulación.

El feble que la legislación concedía con respecto a la ley del metal, que era de un dieciseisavo el quilate y el de peso, que era de 122–5 centésimos de grano, en lugar de 123.247 milésimos de grano, remediaba la dificultad; porque unidos tenían un valor de 0.91 centésimos y hacían que la libra prácticamente valiese tan sólo 24 francos, 99 centésimos, o, lo que es lo mismo, 2/5 por mil menos que el valor señalado de 25 francos.

La nueva moneda de 25 francos, estimado su valor conforme a la ley, habría de ser prácticamente igual a las monedas antiguas en circulación.

Es verdad que para acuñar las nuevas monedas, la legislación habría de conceder, tanto en la ley como en el peso, el feble necesario para su fabricación, pero con reducirlo a uno al millar, con cuyo margen cualquiera Casa de moneda en el mundo puede acuñar monedas de ese valor, la diferencia real y positiva no habría de ser mayor de dos al millar o, lo que es lo mismo, la pérdida para el público inglés, a causa del uso de unas monedas, las nuevas, en vez de las otras, las antiguas, ascendería a 4 chelines en cada 100 o a 20 libras en £10,000.

El distinguido economista inglés, Mr Ernest Seyd, sugería que esta diferencia, en cuanto pudiera afectar los contratos y pagos convenidos que debían hacerse

en las antiguas libras esterlinas, se estimara como una contribución o impuesto no menor de 1/5% por año.

El sacrificio que a su vez se le pedía al gobierno de los Estados Unidos de América llevar a cabo era todavía de menor importancia práctica que el solicitado de la Gran Bretaña. El dollar americano, dada la cantidad de oro fino que contenía de conformidad con la ley de 28 de junio de 1834 el Aguila, debía tener 25-8/10 granos, con ley de 0/900 milésimos, y como el *dollar* francés, o sea, la pieza de oro de 5 francos debía pesar 24 granos 0.89, con la ley también de 0.900 milésimos, la diferencia real era de 0.91 de grano, con un valor de 3 1/2 centavos.

Pero debe tomarse todavía en cuenta que en aquella época los Estados Unidos estaban bajo el régimen del papel moneda y que las oscilaciones que éste sufría a diario en el mercado excedían en cualquier momento de la diferencia que se pretendía establecer entre las antiguas y las nuevas monedas y que en consecuencia toda dificultad de carácter legal desaparecía del todo.

No obstante, ni la Gran Bretaña ni los Estados Unidos consintieron en la modificación de sus leyes monetarias y cuando los Estados Unidos volvieron al régimen de la moneda metálica, por virtud de la ley de 12 de febrero de 1873, el dollar continuó siendo el mismo que fuera anteriormente, cuando había autorizado su acuñación la ley de 3 de Marzo de 1849, en vez de haber hecho un dollar igual en ley y peso al *dollar* francés de 5 francos.

Otro proyecto, más sencillo aún, desechó sin grandes fundamentos la Gran Bretaña y que fué estudiado en la Conferencia Monetaria Internacional de 1867 a la cual lo presentaron el Profesor Graham y Sir Rivers Wilson que a la sazón era el Director de la Casa de Moneda de Londres.

Consistía el proyecto en fabricar en Inglaterra una pieza de oro de 8 chelines que correspondiese a la francesa de 10 francos e igualar el chelín y el franco rebajando al penique un 4% de su valor para acuñar piezas de plata de diez peniques.

Por este medio se creaba un lazo de unión o un eslabón entre los sistemas monetarios de ambos países y se introducía en el inglés el sistema decimal y ambas conquistas, tras de constituir un gran paso para igualar en lo futuro dichos sistemas monetarios, daba a la Gran Bretaña un nuevo y poderoso elemento para el desarrollo de su comercio con Francia y conservaba, como lo hace notar Stanley Jevons, casi inalterable una moneda tan familiar como el penique haciendo de ella la más baja moneda de cuenta.

No obstante, para hacer ver la posibilidad del establecimiento de sistemas monetarios uniformes con una sola moneda internacional como base, se ha llamado la atención acerca de la Unión Latina que se constituyó entre la Francia, la Bélgica, la Suiza y la Italia, por virtud de la Convención de 23 de Diciembre de 1865, y acerca de la Unión Escandinava que se formó entre la Suecia y la Dinamarca, por virtud de la Convención Monetaria de 27 de Mayo de 1873 y a la cual se adhirió la Noruega en 16 de Febrero de 1875.

La existencia de las anteriores Convenciones es un hecho innegable, mas no es cierto que ellas hayan tenido como razón de ser la adopción de una moneda internacional, o lo que es lo mismo, que por medio de sacrificios recíprocos y para disfrutar de los beneficios del empleo de una moneda común, o se haya adoptado un nuevo patrón, o se haya tomado el de una de las naciones para imponérselo a las demás.

La historia de la Convención que dió nacimiento a la Unión Latina es la mejor demostración a este respecto, porque no entró en el propósito de la Bélgica, al sugerir a la Francia su convocación, ni en el de las demás potencias al concurrir a ella, llevar a cabo modificaciones en sus sistemas mone-

tarios que ya eran iguales de antemano debido a la influencia política que desde principios del Siglo XIX había ejercido la Francia sobre las otras potencias europeas.

Cuestiones de menor importancia, aunque graves, de suyo, dieron origen a la Convención de 23 de Diciembre de 1865.

A partir de los descubrimientos de oro de California y de la Australia y a causa tal vez de la disparidad de la relación entre el oro y la plata adoptada por los Estados Unidos y por Francia, la plata huyó del mercado francés y para sustituirla en él, acudió el oro en enormes proporciones.

Este acontecimiento preocupó a los hombres de Estado y se comenzó a estudiar el problema de la baja del oro y el de la escasez de las pequeñas monedas de plata que dificultaba las diarias transacciones de la nación; pero ambos problemas sufrieron todavía una diversa complicación cuando la Suiza redujo de 900 a 800/1000 la ley de las monedas de a franco y, a causa de esto, la Bélgica y la Italia redujeron a 835 milésimos la ley de la misma clase de monedas de plata, porque todas ellas acudieron al mercado francés a cambiarse por monedas iguales que eran fabricadas con ley de 900/1000.

Francia, siguiendo la conducta de la Bélgica y la posterior de la Italia, se resolvió también a acuñar las monedas de 1 franco y de a 2 francos con la ley de 835/1000; mas como las de Suiza tenían todavía una ley menor que era la de 800/1000, resultaba que, a pesar de las reformas hechas a las leyes monetarias, el mal no desaparecía por completo.

La Bélgica solicitó de la Francia la celebración de una conferencia para poner remedio a aquella situación y esto hizo que las cuatro naciones que tenían el franco como unidad monetaria ajustaran y firmaran la Convención de 1865.

El origen de la Convención Monetaria Escandinava celebrada entre la Suecia y la Dinamarca en 27 de Mayo de 1873 y a la cual se adhirió después la Noruega en 16 de Octubre de 1875, fué la cuestión de la baja de la plata, como antes fuera el problema de la baja del oro el que había dado nacimiento a la Convención de la Unión Latina.

El patrón monetario en los reinos escandinavos hasta el año de 1873 era la plata y esto hizo que marcharan a la par entre sí y sobre todo con Hamburgo que, a causa de su proximidad y de sus grandes riquezas, jamás había dejado de ser el banquero del comercio Escandinavo. La demonetización del antiguo marco-banco de plata despertó la atención de los economistas y de los hombres de Estado de Copenhague y Stockholmo y los estimuló a buscar un sistema que tuviese por base el oro para evitar los efectos desastrosos que ya comenzaba a engendrar, a causa de su nueva política monetaria, la legislación del imperio alemán.

Dinamarca, Suecia y Noruega nombraron una Comisión para el estudio de este asunto importantísimo y el informe de esa Comisión, presidida por el Señor Conde de Sponneck, hace ver que si se hicieron esfuerzos generosos para adherirse a la Unión Latina o para adoptar sistemas monetarios semejantes al de la Gran Bretaña y Alemania, fué necesario, tomando en cuenta los hábitos y tradiciones de sus pueblos, seguir un camino distinto.

En efecto, se estudió la adopción del sistema monetario francés; pero como éste no tenía por base el oro, sino el oro y la plata juntamente, se convino en la imposibilidad de aceptarlo a pesar de que la Suecia lo había públicamente recomendado desde 1868, aplicando a sus monedas el sistema decimal y acuñando piezas de 10 francos en oro como las francesas, que se llamaron Carolins.

Se pensó también en acomodar la legislación monetaria a los sistemas monetarios inglés o alemán; pero fueron obstáculos para que se adoptara el primero,

a pesar de que la libra esterlina ofrecía gran atractivo por ser la moneda más esparcida en el mundo, la naturaleza de la división de la moneda y el sistema duodecimal que le sirve de base, así como lo fué también para aceptar el segundo la imposibilidad de poner de acuerdo las monedas escandinavas con el marco alemán, sin recurrir a los cálculos difíciles y numerosos que hubiesen hecho necesarios la relacion y la proporción de las dos monedas entre sí.

La Comisión hubo de decidirse a crear una nueva moneda de oro en vez de la antigua de plata y resolvió lo que después sirvió de base a la Convención: acuñar con un kilogramo de oro fino para Dinamarca 248 piezas y 124 piezas para la Suecia, haciendo que la décima parte de la primera moneda y la vigésima de la segunda fueran la unidad de cálculo, bajo el nombre de Krone.

Como se ve, las dos Convenciones, la de la Unión Latina y la de la Unión Escandinava, no han tratado de establecer sistemas monetarios internacionales con sacrificio mutuo o con sacrificio de una sola de las partes contratantes, sino que ahí donde ellos, si no han sido idénticos, sí han sido iguales las monedas, los gobiernos han querido uniformar los principios y preceptos que pudieran servir de base para su fabricación.

Los apóstoles de la unidad monetaria internacional, los defensores de ese ideal más o menos irrealizable, de esa verdadera pero generosa utopía, han luchado en vano contra los usos, las tradiciones y las costumbres de los pueblos, porque no han logrado que a sus doctrinas y enseñanzas, que a sus principios y máximas, se acojan los pueblos para simplificar sus relaciones comerciales y el intercambio a que ellas dan lugar.

El Pan-Americanismo, del cual han sido creadores Simón Bolívar en Sud América y James G. Blaine en los Estados Unidos, no podía dejar de inscribir en su programa el principio de la unidad monetaria internacional y a semejanza de lo que en Europa intentaran los gobiernos, se creyó que era conveniente que a su vez los gobiernos de América discutieran entre sí la conveniencia de adoptar una moneda común.

El distinguido jurisconsulto americano Mr. James G. Blaine, concibió la idea de reunir en una conferencia a todas las naciones de la América y la ley del Congreso de los Estados Unidos que convocó la Conferencia Internacional Americana enumeró entre los asuntos que debían serle sometidos para su estudio el siguiente: "*la adopción de una moneda común de plata emitida por cada gobierno, la cual será moneda legal en todas las transacciones comerciales entre los ciudadanos de todos los Estados de la América.*"

La Conferencia Internacional Americana se reunió en Washington en el año de 1889 y al discutir la anterior proposición, ocupó de preferencia su atención la cuestión gravísima en aquella época de la depreciación de la plata y la conveniencia o inconveniencia de adoptar el monometalismo oro o el bimetalismo del oro y de la plata, como base de los sistemas monetarios. Los Estados Unidos de América hacían entonces generosos esfuerzos para conservarle al metal blanco su perdido prestigio y para devolverle las augustas funciones que el mundo civilizado se esforzaba en arrebatarle y juzgaron sin duda alguna que era preferible dirigirse a la Europa, nó en su solo nombre, sino en nombre de todas las naciones de la América.

La Conferencia Internacional Americana, en 7 de Abril de 1890 aprobó lo siguiente:

"La Conferencia Internacional Americana es de opinión que resultarían grandes ventajas al comercio, entre las naciones de este continente, por el uso de una moneda o monedas que circulasen con el mismo valor en todos los países representados en esta Conferencia y, en consecuencia, recomienda: I., que se establezca una Unión Monetaria Internacional Americana; II, que como

bases de esta Unión se emitan una moneda o monedas internacionales que serán uniformes en peso y ley y que se usarán en todos los países representados en esta Conferencia; III, que para dar completo complimiento a esta recomendación se reúna en Washington una comisión compuesta de uno o más delegados por cada una de las naciones representadas en esta conferencia, para que estudien la cantidad y clase de monedas, el uso que se les dará, el valor y la proporción de la moneda o monedas internacionales de plata que se emitan y sus relaciones con el oro; IV, que el gobierno de los Estados Unidos invitará a la Comisión a reunirse en Washington dentro de un año a partir de la fecha de la clausura de esta Conferencia.

La Comisión, de acuerdo con lo establecido en la recomendación aprobada por la primera Conferencia Internacional Americana, en el año de 1891, aprobó las proposiciones que presentaron los delegados de los Estados Unidos, a saber: I, que aunque plenamente se reconoce la gran ventaja que proporcionaría al comercio la creación de una moneda o monedas de carácter internacional y la importancia de que así sucedería, no se considera sin embargo que es útil por el momento recomendar su establecimiento, visto por una parte la actitud que respecto de la plata como moneda han tomado varias de las grandes potencias comerciales de Europa y, por la otra, la diferencia de valor proporcional establecida por las leyes de los diferentes países representados en la Comisión entre el oro y la plata; II, que muchas de las dificultades que se oponen al establecimiento de una moneda o monedas de carácter internacional pueden obviarse por la adopción del bimetalismo y el señalamiento definitivo, por las grandes potencias comerciales si puede obtenerse, de un valor proporcional reconocido por todos entre el oro y la plata; III, la Comisión recomienda que los países en ella representados se unan por el intermedio de sus respectivos gobiernos para procurar que se reúna una conferencia monetaria de todas las potencias del mundo, la cual se celebre en Londres o en Paris en 189[–] y tenga por objeto estudiar: I, el bimetalismo y la igualdad del oro y la plata bajo el tipo de proporción relativa que se fije por convenio internacional; II, la asimilación universal del tipo monetario, tanto de oro como de plata y su circulación legal internacional para todos los países.

La consecuencia del esfuerzo impendido por las Naciones de la América fué la reunión en Bruselas de la Conferencia Monetaria Internacional de 1892, la cual suspendió sus sesiones sin llegar a acuerdo alguno y sin llegar a reanudar sus sesiones después.

Durante muchos años este problema dejó de preocupar la atención de los economistas y de los publicistas de la América, pero recientemente en la primera Conferencia Financiera Pan-Americana el distinguidísimo experto en cuestiones monetarias, Mr. Chas. A. Conant, llamó la atención de la Conferencia, y especialmente del Comité, relativo a la uniformidad de la legislación, pidiendo que el asunto fuese de nuevo estudiado con cuidado, con la mayor delicadeza posible y con un tacto exquisito. Séame permitido reproducir sus palabras porque ellas, a la par que muestran su generoso deseo, demuestran la suma dificultad, si no la imposibilidad, de alcanzar la adopción por parte de los Gobiernos de la América, de una moneda común:

"No soy yo un creyente en la próxima adopción de un sistema monetario uniforme o de una uniforme moneda. La uniformidad en el patrón es, sin duda, deseable, pero la uniformidad en la unidad no puede obtenerse sin cuidadoso estudio de la cuestión de salarios y de precios en cada país. Cuando en un país la unidad es fácilmente un submúltiplo de la de los Estados Unidos, puede llevarse a cabo algún progreso para una mejor adaptación de la unidad a la de los Estados Unidos. Dos países han adoptado ya la unidad americana: Nicaragua, por virtud de su ley de 20 Marzo de 1912, y Cuba, por la

ley de la Defensa Económica de 29 de Octubre del año pasado; pero aconteció que en un caso estaban en situación de que una nueva unidad era un múltiplo de la unidad de cambio depreciada y, en el otro, sucedió que el mejoramiento gradual del cambio había hecho las monedas en uso prácticamente iguales al dollar americano.

"Creo que el asunto debe ser cuidadosamente estudiado y que debe estudiarse con referencia, y con cuidadosa referencia, a los sentimientos nacionales, a los intereses económicos nacionales de todos los países respectivos, y no con el intento de adoptar un único proyecto o de imponer un sistema rígido de cambios que no se adapte a nuestra unidad americana.

"Con este propósito, he presentado un proyecto no muy ambicioso para someter el asunto al Comité permanente. Tal vez voy demasiado lejos hablando de proyecto, porque no he preparado sino una mera sugestión: Que el Comité permanente de la uniformidad de la legislación quede autorizado para estudiar los mejores medios de facilitar las remisiones de dinero y de los instrumentos de crédito entre los países americanos, aproximándose a la estabilidad o uniformidad que sea practicable en sus sistemas monetarios, dejando en cuenta los intereses nacionales económicos y, con este propósito, el referido Comité quedará también autorizado para nombrar a su discreción subcomités, empleados expertos, así como para hacer recomendaciones a los varios países representados."

La proposición de Mr. Conant tiene toda la importancia de una enseñanza; porque ella misma pone de relieve la convicción profunda de la inutilidad de los esfuerzos por hacer, aunque recomienda que estos no cesen de hacerse jamás.

El problema de la moneda internacional para las Naciones de la América no es ya, como en Europa, la adopción de una nueva moneda que pueda escogerse entre los diferentes países, sino la adopción del dollar americano que reúne a maravilla todas las condiciones apropiadas para hacer de él una moneda internacional. Cuando Stanley Jevons, en su libro "Money and the Mechanics of Exchange" habló del dollar americano y de su posible adaptación para llenar las funciones de moneda internacional, dijo: "Está dividido de acuerdo con el sistema decimal y de la manera más conveniente. Corresponde a las monedas que por dos o tres siglos han tenido una mayor circulación y han sido consideradas como unidades de cuenta, de tal modo que tiene en su favor el beneficio de aquella larga experiencia, pero sobre todo está firmemente adoptado como la moneda de una nación que en tanto que la humana sabiduría puede penetrar el futuro, está destinada a ser la más numerosa, la más rica y la más poderosa de todas. Esa nación que ha nacido de las mejores clases sociales de Inglaterra y que ha absorbido mucha de la mejor sangre de las naciones europeas, y que ha heredado el más rico territorio del mundo, habrá de tener en lo futuro una importancia tal, de la cual tal vez no tienen conciencia ni aún los mismos americanos."

La profecía de Stanley Jevons está cumplida y el dollar americano que por su peso y ley, como moneda de plata, fué el heredero del prestigio de los antiguos pesos acuñados en la época colonial en la Casa de moneda de México, como moneda de oro ha alcanzado una inmensa supremacía que lo hace ser ya en la actualidad la mejor moneda para liquidar las transacciones internacionales por la firmeza de su valor, para lo cual contribuye, fuera de toda duda, la grandeza industrial y económica de la Nación que lo emite y del pueblo donde circula.

¿Cabe discutir la conveniencia que podría resultar de la adopción del dóllar o de sus submúltiplos como moneda de las Naciones de la América? El beneficio que de esa medida podría resultar está fuera de toda discusión,

pero su adopción, como el problema de la unidad monetaria internacional, seguirá constituyendo casi una utopía, un vago ensueño de realización imposible, porque los intereses económicos, las costumbres profundamente arraigadas y aún el sentimiento nacional que muchas veces se vincula en una moneda, como se vincula en una bandera, se opondrán a ello como obstáculos inseparables.

Cuando los Estados Unidos Mexicanos nombraron una gran Comisión para emprender estudios acerca de la cuestión monetaria a fin de presentar el proyecto de una nueva moneda de oro y la reforma de todo el sistema monetario antes en vigor, estudios que dieron origen a la ley monetaria de 25 de Marzo de 1905, entre los diversos asuntos que cuidadosamente se examinaron estuvo el de la adopción del dóllar americano. La Subcomisión, encargada de examinar el asunto, resueltamente se pronunció en favor de dicha adopción, porque el valor que en el mercado había alcanzado la antigua unidad monetaria hacía posible aceptar una relación entre el oro y la plata cercana a la de 1 a 32. El nuevo peso mexicano, dada la relación de un gramo de oro a 32 gramos de plata, podía contener:

Oro puro	0. gr. 7638
Oro de 0.900 milésimos	0. gr. 8486

En el caso de hacer el nuevo peso la décima parte de la libra esterlina para nacer de ella un submúltiplo, el peso debía contener:

Oro puro	0. gr. 73223
Oro de 0.900 milésimos	0. gr. 8136

Haciendo que el nuevo peso fuese exactamente la mitad del dollar americano, debía contener:

Oro puro	0. gr. 7258
Oro de 0.900 milésimos	0. gr. 8359

Haciendo del nuevo peso de oro un múltiplo del franco francés y, en consecuencia, igual a 2 francos 50, debía contener:

Oro puro	0. gr. 7258
Oro de 0.900 milésimos	0. gr. 8064

Las relaciones entre el oro y la plata, tomando como base los submúltiplos de las monedas inglesa y americana, o un múltiplo de la francesa, eran:

Décima parte de la libra esterlina, relación de	1 a 33.37
Mitad del dollar americano, relación de	1 a 32.48
Múltiplo del franco, relación de	1 a 33.67

En el caso de adoptar la relación fija entre el oro y la plata de 1 a 32 que era el doble de la antigua relación de la ley monetaria mexicana de 1 a 16, la nueva moneda iba a contener:

En exceso sobre la décima parte de la libra esterlina en la ley de 0.900 milésimos	0.0350
En exceso sobre la mitad del dollar americano en la ley de 0.900 milésimos	0.0127
En exceso sobre el múltiplo del franco	0.0422

Como se ve, era muy fácil llevar a cabo un pequeño sacrificio para la adopción del dóllar. El exceso era en realidad de un centavo y cuarto sobre el valor del mercado y hubiera valido le pena llevarlo a cabo para hacer del nuevo peso mexicano exactamente la mitad del dollar americano, y, no obstante, el legislador mexicano se vió en la necesidad de adoptar una moneda

nueva, distinta de la mitad del dollar, de la décima parte de la libra y de un valor de 2 francos 50, para someterse a las exigencias de los intereses nacionales y aproximarse lo más posible al valor en oro que en aquellos momentos tenía la moneda nacional.

El peso mexicano se hizo de Gr. 75 centésimos de oro puro y entró a la circulación como una moneda nueva y diferente a todos sus congéneres.

Cabría preguntar sin embargo ¿porqué en Cuba hubo de adoptarse el dollar americano?

La ley de la Defensa económica de 29 de Octubre de 1914, en medio del caos monetario que existía en Cuba, adoptó el dollar, nó porque la mejora gradual de sus cambios hubiese levantado las monedas en circulación hasta alcanzar su valor como opinó Mr. Conant, sino porque desde el día en que la independencia de la Isla fué obtenida, causa de la guerra de los Estados Unidos con España y como su forzosa y natural consecuencia, el dollar llegó a ser la unidad monetaria fiscal antes de que fuera la unidad monetaria nacional. El dollar ha sido en Cuba, desde su independencia, la moneda fiscal por virtud del decreto del Presidente de los Estados Unidos de 28 de Diciembre de 1891, y desde entonces por él se regularon los impuestos que el pueblo ha pagado durante quince años y, habiendo servido como unidad monetaria, fácil fué, y conveniente, conservarlo.

La situación de Cuba, como se ve, fué enteramente excepcional y no podrá presentarse ninguna otra análoga cuando se trate de reformar las leyes monetarias de los demás países de la América.

El más serio obstáculo no obstante que para la adopción del dollar americano puede hallarse, consiste en el régimen del papel moneda que existe en un gran número de países. Este régimen presenta entre sus mayores inconvenientes, cualesquiera que sean sus vicisitudes, la constante fluctuación del valor de la unidad monetaria, y, sin duda alguna, el día en que sea posible establecer de nuevo el imperio de la moneda metálica, ésta habrá de escogerse tomando en consideración el valor que la unidad monetaria alcance cuando la reforma tenga lugar.

No dependerá de la buena voluntad del legislador ni de la conciencia que abrigue de las conveniencias de facilitar sus transacciones con el mercado americano, sino que los intereses económicos de cada país y las oscilaciones que sufra el medio circulante determinarán la índole y naturaleza de la nueva unidad monetaria que haya de escogerse para fijar en lo venidero el valor de todas las cosas por medio de la nueva moneda.

El estudio del problema de la moneda internacional revela que las monedas internacionales que han existido o que podrán existir en el porvenir son más bien la obra inconsciente de los pueblos que las emplean, que la consecuencia de un esfuerzo común de los Gobiernos.

La moneda, por el uso a que está destinada y por su naturaleza misma ha sido, a través de la historia, más bien la obra del pueblo que del legislador. Por eso cuando los economistas, cuando los financieros, quieren formar un concepto cabal y justo de lo que es una verdadera moneda internacional, vuelven los ojos hacia el viejo peso de plata que en la época colonial se acuñaba en la Nueva España, y al peso mexicano, sucesor suyo, que por luengos años fué la moneda del Continente Americano y de todo el Extremo Oriente, donde todavía hoy perdura, a pesar de la poderosa competencia que sucesivamente le hicieron los pesos comerciales emitidos por los gobiernos americano, francés e inglés.

El peso mexicano, en efecto, desempeñó funciones monetarias en todas las posesiones inglesas de la América del Norte, fué, conforme a la ley monetaria de 6 de Julio de 1785, la unidad monetaria ideal o la unidad de cuenta de los Estados Unidos de América hasta que fué demonetizado por la ley de 21 de

Febrero de 1857; circuló en las Antillas Españolas, aun por virtud de leyes expresas, como la Ordenanza Real fechada en 8 de Noviembre de 1708 y, si huyó de Cuba a causa de la emisión del papel moneda, fué necesario demonetizarlo en Puerto Rico por virtud de la ley de 1895. El peso mexicano fué también la moneda de las Islas Filipinas hasta que la creación del nuevo sistema monetario, llevada a cabo bajo el gobierno de los Estados Unidos, hubo de cerrarle aquel mercado.

Aquel Peso mexicano, aquella vieja moneda internacional que tuvo cuotización especial en el mercado de Londres y que popularizó casi durante un siglo al Gobierno que lo emitió, dejó de existir por virtud de la ley monetaria de 25 de Marzo de 1905, pero siempre habrá de ser considerado por el mundo civilizado como un perdurable monumento histórico y como la moneda comercial por excelencia.

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Adjourned at 11.40 o'clock.

JOINT SESSION OF SECTIONS IV AND IX.[1]

PAN AMERICAN UNION,
Tuesday afternoon, December 28, 1915.

Chairman, ANTONIO RAMÍREZ FONTECHA.

The session was called to order at 2.30 o'clock by the chairman.

Papers presented.

Introductory Remarks:

Hon. William C. Redfield, Secretary of Commerce.
Hon. Andrew J. Peters, Assistant Secretary of the Treasury.
Edmund J. James, president University of Illinois, Urbana, Ill.

GENERAL TOPIC:

Preparation for Trade, Domestic and Foreign.

(*a*) From the standpoint of the business man, by J. A. Farrell, former president National Foreign Trade Council, New York, N. Y.

(*b*) From the standpoint of the educator, by Edwin F. Gay, dean Graduate School of Business Administration, Harvard University, Cambridge, Mass.

[1] Papers printed in Volume IV, Education, of the Proceedings of the Second Pan American Scientific Congress.

SECTION IX.—GUEST OF THE AMERICAN ECONOMIC ASSOCIATION.

New Willard Hotel,
Tuesday evening, December 28, 1915.

Chairman, Rear Admiral Charles Herbert Stockton.

The meeting was called to order at 8 o'clock by the chairman.
Presidential Addresses:

The apportionment of representatives, by Walter F. Willcox, president American Economic Association.

The relation of history to nationalism, by H. Morse Stephens, president American Historical Association.

SECOND GENERAL SESSION OF SECTION IX.

NEW WILLARD HOTEL,
Wednesday morning, December 29, 1915.

Honorary Chairman, His Excellency, the Brazilian Ambassador, DOMICIO DA GAMA.

Chairman, S. N. D. NORTH.

In the absence of Dr. L. S. Rowe, chairman of the section, the session was called to order by Dr. S. N. D. North, chairman of the subsection on commerce, who said:

GENTLEMEN: In the absence of Dr. Rowe, who, I regret to say, is seriously ill, it becomes my duty to call this meeting of Section IX together and to introduce to you as the honorary chairman this morning His Excellency Domicio da Gama, ambassador to the United States from Brazil, who will do you the honor of presiding over your session.

The CHAIRMAN. Gentlemen, a diplomat and a diplomat with rather a long career should not be surprised at any event in his peaceful, and, as some people think, his rather useless vocation, but I confess my surprise—although a very pleasant surprise it is—to be called upon to preside over the meeting of this very considerable section of the Second Pan American Scientific Congress, which deals with transportation, commerce, finance, and taxation. Although these subjects are somewhat out of my sphere, I am very much interested in all these matters, being, as I am, the agent of one of the South American Governments, so that I do not feel myself entirely out of contact with you. I feel sure anything you may say in regard to questions of transportation, commerce, finance, and taxation will be useful and will be a source of learning, at least for your chairman at the session of this morning.

In calling the session to order I ask Mr. Branch, the secretary of this section, to read the paper by Mr. Juan José Reinoso, of Peru, on the topic, "Is it desirable and possible to establish uniform rates, methods, and classifications in port charges, customs regulations and classifications between the North, Central, and South American countries?"

Mr. CASASUS. Mr. Chairman, will you allow me to make a suggestion before proceeding with the reading of the paper?

The CHAIRMAN. Certainly.

Mr. CASASUS. Mr. Chairman and gentlemen, it seems to me that it would be appropriate to pass a resolution expressing the regret and sorrow that we all have on account of the serious illness of Dr. Rowe. We are all acquainted with the wonderful career of Dr. Rowe, and we regret that we have been deprived, on account of his illness, not only of his presence but of the knowledge that his presence would bring to the sessions of this section of the Pan American Scientific Congress. It seems to me that it would be well if we expressed to him our heartfelt sympathy.

The CHAIRMAN. Gentlemen, I do not doubt that the remarks of Dr. Casasus express the general feeling of those participating in this meeting. As presiding officer I will consider the remarks of Dr. Casasus as being in the form of a motion and will put that motion to a vote of the section.

The motion was unanimously agreed to.

The CHAIRMAN. There will be a draft of this resolution transmitted to Dr. Rowe with the best wishes of the assembly for his prompt recovery.

Mr. H. N. Branch will now read the paper prepared by Mr. Reinoso.

¿ES DESEABLE Y POSIBLE ESTABLECER TARIFAS, MÉTODOS Y CLASIFICACIONES UNIFORMES EN LOS GASTOS DE PUERTO, REGLAMENTOS Y CLASIFICACIONES DE ADUANA ENTRE LAS REPÚBLICAS DE NORTE, CENTRO Y SUD AMÉRICA?

Por JUAN JOSÉ REINOSO,

Ex-Ministro de Hacienda y Comercio del Perú.

El desarrollo, la eficiencia y el progreso del comercio, dependen, indudablemente, de la suma de facilidades que se le puedan proporcionar, de suerte que todo lo que tienda a ese fin ha de ser sumamente recomendable y digno de la mayor atención.

Así como el ideal en el intercambio sería la adopción de una moneda uniforme que pudiera regir las transacciones en todos los mercados, sin alteración de cotizaciones, ni depresión, ni alzas o bajas de valor, estimamos que sería de gran provecho para las operaciones comerciales, el establecimiento de tarifas, métodos y clasificaciones uniformes, que reglaran aquéllas, facilitando, de esa manera, las transacciones y reduciendo al mínimum los cálculos y operaciones preliminares, economizando el tiempo, que es el más precioso de los factores en estas manifestaciones de la actividad humana.

Pero si llegar a ese resultado satisfaría los anhelos de cuantos dedican sus energías a esta rama de las relaciones sociales, hay que confesar que, desgraciadamente, no ha de ser posible alcanzarlo tratándose de los gastos de puerto, ya porque no es verosímil que puedan uniformarse los medios y los métodos de transporte, que han de influir poderosamente en su costo, ya porque hay que contemplar la diversidad de necesidades por satisfacer en los diferentes medios sociales, o mejor dicho en la múltiple clase de localidades en que se supone que han de realizarse aquellas operaciones. En efecto, los salarios, el género de

vida, el grado de cultura, el clima, el desenvolvimiento y extensión del comercio, las tendencias de la raza, los alcances de la educación y todos los demás factores étnicos y sociológicos que diversifican a los hombres, son otros tantos obstáculos para obtener la uniformidad en los tópicos propuestos, relativamente a los gastos de puerto, pues aun cuando llegaran a establecerse métodos y clasificaciones análogos, no podría hacerse lo mismo con las tarifas, que habrían de diferenciarse por las razones expuestas.

No pasa lo mismo, en nuestro concepto, relativamente a los temas que se refieren a las operaciones de las Aduanas, ya que en esta materia no se pretende, ni podría intentarse siquiera, la uniformidad en las tarifas de impuestos. Pero sí es deseable y posible alcanzar la uniformidad en la legislación o sea en los reglamentos y en las clasificaciones, ya que esto no dependería sino de la decisión y buena voluntad de los pueblos que, contemplando sus mejores intereses, tendiesen a ese fin, ya por la realización de convenios especiales, ya por la reunión de un Congreso ad hoc, que, inspirándose en los más elevados ideales y en las orientaciones más prácticas y provechosas, sancionase esta aspiración nobilísima, en beneficio de la más importante y universalmente estimada de las instituciones humanas.

La uniformidad en los reglamentos marítimos y comerciales y en las clasificaciones de aduana es perfectamente practicable, desde que, respecto de los primeros, pueden establecerse en todos los países las mismas reglas, taxativas o restricciones iguales y penas análogas, si se inspiran en la conveniencia comercial y en un espíritu de justicia y de equidad; y en cuanto a las segundas, lo conceptuamos más fácil todavía, ya que es muy sencillo adoptar unas mismas denominaciones para designar los mismos objetos de comercio, distribuirlos en el mismo orden y en forma también igual, sujetándolos a la división científica, por los reinos de la naturaleza, que hoy rige en gran número de las naciones de América.

Aun cuando entre los altos propósitos del Congreso Científico Panamericano sólo se alcanzara a hacer viable el proyecto de un Congreso especial que lograse obtener el fin últimamente contemplado, se habría realizado obra sumamente provechosa para el comercio de este Continente, procurando su desenvolvimiento fácil y armónico y contribuyendo eficazmente a estrechar los vínculos que están llamados a constituir una sola y poderosa entidad de la gran familia americana.

The Chairman. Gentlemen, this very brief but substantial paper is now subject to discussion.

Mr. V. Gonzales. Mr. Chairman, Mr. Reinoso makes a very good suggestion in the paper which has been read, and if I can find some one to second the motion I will put the suggestion in the form of a motion. I refer to the proposal to call a special customs congress to discuss the possibility of uniformity of laws, especially the classification of customs tariff. That is a question that would probably be discussed only by experts in customs work, of whom there are plenty in each country. I have had experience in this country in such matters and I am aware of the difficulties that are encountered every day, for instance, in the declaration of goods when they are exported on consulate invoices. In that regard the regulations and the exigencies of each country are so different that a man must really be an encyclopedia in order to comply with all the requirements of the various countries. Then, importers are fined, sometimes to a very consider-

able extent, and a lot of trouble is otherwise caused, not on account of bad faith, but merely because of mistakes which have been committed. So, if anybody will second my motion, I will put Mr. Reinoso's suggestion into concrete form.

There followed a discussion in Spanish of the motion proposed by Mr. Gonzales, participated in by Mr. Julio Philippi, of Chile, Mr. Gonzales, and others. (This discussion was not reported.)

The CHAIRMAN. Gentlemen, from the very brief but substantial paper, as I have said, of Mr. Reinoso a result has followed which has already taken a practical turn. Mr. Gonzales, the eloquent speaker, whom I had the pleasure of hearing in New York the other day, has proposed the calling of a congress to discuss the question of customs classifications and regulations. Mr. Philippi says that that would make duplicate work; that such a congress was called in Washington a few years ago, as a result of which minutes were published. But it seems that no work has since been done along that line and that the matter has apparently been forgotten. Both Mr. Philippi and Mr. Gonzales propose that this question should be taken up with the Pan American Union, or with the governing board of the Pan American Union, with a view to their making proposals to the various Governments to collect and collate all legislation and regulations in regard to customs in the various countries composing the Pan American Union.

Mr. C. E. MCGUIRE. Mr. Chairman, it might be in order to remind the delegates present that the United States section of the International High Commission has prepared or is prepared to make a respectful recommendation of this kind to the other sections of the commission at the forthcoming meeting in Buenos Aires in April. That recommendation will be in line with that proposed as a result of the present discussion.

Mr. EDWIN R. A. SELIGMAN. Mr. Chairman, may I ask the last speaker as to whether that recommendation bears simply and specifically upon this question of customs regulations and tariffs, or whether it is of a more generic nature?

Mr. MCGUIRE. Distinctly and specifically on the topic which the program sets forth for discussion and attention.

Mr. SELIGMAN. Would that, then, make unnecessary such a motion as this, or would the two mutually support each other?

Mr. MCGUIRE. I think the proposed resolution would lend support to the action to which I have referred.

The CHAIRMAN. Would it be in support of it?

Mr. MCGUIRE. It would be in support of it.

Mr. SELIGMAN. If I may be permitted I should like to say just a word. I did not have the pleasure of hearing the paper that was read, but I have heard enough of the very interesting and eloquent

discussion by the two gentlemen to have "caught on," as we say in this country, and I want to say merely a word in appreciation of this motion and to explain why I think it is of very great importance not alone to all the countries involved, but more specifically also to the United States.

The point about customs tariffs and port regulations of course involves some difficulty. It involves a difficulty which is due to the fact that the different countries in question are in different stages of economic and commercial development. If all of us—North America, South America, and Central America—were in the same stage of economic and commercial development so that we could all say we are pursuing the same policy—whether it be a policy of protection or whether it be a policy of free trade is immaterial so long as it is a unified policy—it would be an exceedingly easy thing to unify all the regulations, because we would all be working for the same end and probably the local differences would not be insuperable. The real complication arises from the fact that, as Friedrich List pointed out almost a century ago, each nation in its developmental stage occupies a little different attitude toward the questions of protection, liberalism, or free trade. Therefore we must not be surprised to find in each one of our countries regulations and principles which are more or less opposed to those found in other nations. Accordingly, I think if we have such a congress as has been proposed we must not delude ourselves with too fond and hopeful expectations. We can never have a complete unity and harmony of administrative regulations until we have a complete unity and harmony of the underlying economic and commercial principles involved. However, much is to be said for the resolution which has been presented to this assemblage, because there are always minor, purely technical, and administrative matters which are more or less common to the countries which pursue a protective régime and those which are more in favor of the liberal or free-trade attitude.

The situation, of course, is this: Each one of our countries, north and south, has grown up under separate and distinctive influences, and we have adopted restrictions and administrative regulations, many of which, perhaps, are not defensible from a mere theoretical point of view. We have made concessions for temporary exigencies; we have allowed this interest or that interest, whether it be the shipping interest or the manufacturing interest or the industrial interest, to dictate a policy, and I am quite sure, from a study of similar institutions abroad—although knowing very little of what is the situation in Central and South America—I am very sure that there is a great deal of this administrative apparatus which can be brought into better unity and harmony without imperiling the interests of any one country.

Of course, the difficulty with a congress of the kind that is contemplated is the same difficulty also that we find whenever we want to have international, as against national, economic relations. The difficulty is that of securing a subordination of particular interests to general interests, and, naturally, we can go too far in that direction. Naturally, as we have heard in this congress already and as we shall have occasion to hear a great deal more during the next few days, there is a legitimate and very important field, both for the national economic life and for the broader international life. But I feel firmly convinced, Mr. Chairman, that there is an ample field for such a correlation of all these different administrative regulations whereby they can be made to work in the interests of the whole without really endangering the interests of any particular part.

I, therefore, speaking for the United States, feel that we also would be perfectly ready and willing to make concessions of this or that nature in order to attain a policy which would be advantageous to the group as a whole.

Mr. GONZALES. Mr. Chairman, I will now put in concrete form the motion I desire to make. The motion is as follows:

That Section IX of the Second Pan American Scientific Congress recommend to the Bureau of the Pan American Union the gathering of all the laws and regulations of customs and navigation, and the preparation of a project tending to the unification as far as possible of classifications and regulations in accordance with that previously agreed upon by the Customs Congress and Pan American Conference at Buenos Aires in 1910.

The CHAIRMAN. The motion of Mr. Gonzales is subject to discussion, and a vote on it will be deferred until the conclusion of the discussion.

There followed a discussion in Spanish, which was participated in by Mr. Eusebio Ayala, of Paraguay, Mr. Philippi, Mr. Gonzales, the presiding officer, and others. (This discussion was not reported.)

The CHAIRMAN. Gentlemen, Mr. F. M. Halstead, Chief of the Division of Customs, United States Treasury Department, may bring some light to this discussion, in which I have had the pleasure of seeing two of the speakers already come to an agreement. So I invite Mr. Halstead to take part in the discussion.

Mr. HALSTEAD. Mr. Chairman, I ask permission to read my paper at this time. I should like to engage in a discussion as to details, but I do not feel at liberty to do so while I still have a paper to read.

I will say at this time that I am not a scientist and I am conscious of the fact that I have not prepared this paper in a scientific manner. My understanding of a scientific paper is that it is divided generally into four parts. The first part sets forth one side of the matter; the second part proves that is not true; the third part disproves everything that has been said before; and the fourth part

comes to the conclusion that there is no conclusion that can be reached in the matter, and hopes that with the advance of human knowledge at some time the mystery may be solved. After my somewhat limited education as a scientist was completed, I was educated as a lawyer, and therefore I have handled the matter as a lawyer would. Being asked for an opinion upon a given subject, I have given an opinion. What it may be worth has this merit that there is no fee attached. In that, at least, I resemble the scientist rather than the lawyer.

I will now read the paper which I have prepared.

IS IT DESIRABLE AND POSSIBLE TO ESTABLISH UNIFORM RATES, METHODS, AND CLASSIFICATIONS IN PORT CHARGES, CUSTOMS REGULATIONS, AND CLASSIFICATIONS BETWEEN THE NORTH, CENTRAL, AND SOUTH AMERICAN COUNTRIES?

By F. M. HALSTEAD,

Chief Division of Customs, Department of the Treasury.

The question presented is whether it is desirable and possible to establish uniform port and customs regulations and methods between the North, Central, and South American Republics.

As to the desirability of such action, the answer must be in the affirmative, and for many reasons, the most important of which is that uniform regulations would mean reasonable regulations. Uniform regulations would be possible only after a searching inquiry and discussion in which the reasonableness of every regulation must be established. Many of the existing regulations are not only unreasonable, but are such that it is impossible to comply with those of one country without violating those of another. To illustrate: Under the laws of this country every vessel of the United States departing for a foreign port must have on board a crew list certified by a shipping commissioner. Upon the vessel's return the master must produce this original crew list, which is used to muster the crew, to see that all are properly accounted for. Under the regulations of one South American country this crew list must be surrendered to the customs officers of that country, by whom it is permanently retained, rendering it obviously impossible to comply with the laws of the United States.

The regulations of South American countries which are the most frequent subjects of complaints are those relating to the invoices and bills of lading required for imported merchandise, the manifesting of the cargoes of vessels, and the severe penalties imposed for errors in such documents, even though purely technical and unintentional. The requirements relating to the invoicing of merchandise are as various as the countries interested are numerous, no two countries having the same requirements. Some countries require 3, some 4, some 5, and some 6 copies of an invoice, and some require, in addition, 2, 3, or 4 copies of the bill of lading.

The fees for the certification of invoices vary from nothing to as much as 6 per cent of the value. While it is true that this fee may be considered as a surtax equal to an ad valorem duty of 6 per cent, it must be paid by the shipper before the goods leave this country. Such a surtax has a strong tendency to prevent the shipment of goods to that particular country before a sale has been made, with a view to placing the merchandise in warehouse and selling it after its arrival, and if no sale is made, having the goods returned. This is the method usually employed by merchants to enter a new foreign market

with goods for which it is believed that a demand can be created but for which no market as yet exists. If, to do this, the merchant must first pay a tax equal to 6 per cent of the value of the goods, the growth of the foreign commerce of that country will be slow indeed.

Some countries require that the manifest of the importing vessel be certified by the consul of that country before the vessel's departure. This necessitates the vessel's remaining in port after its cargo is all laden and stowed a sufficient length of time for the manifest to be written up from the bills of lading and certified by the consul, a delay of at least one day, the cost of which must, of course, be added to the freight. In this country and in most European countries manifests made up while the ship is at sea are accepted and are found to be all that is necessary.

Most countries collect a tax based upon the tonnage of vessels arriving from foreign ports. Each country has a different method of ascertaining the tonnage of vessels, thus involving delays and the expense incident to measurements for tonnage, which might be avoided if a uniform method of the measurement of vessels were adopted. Three South American and one Central American country prohibit the consignment of merchandise "to order." This prohibition prevents a shipper from financing his shipment by the method so frequently employed by merchants in this country and in Europe of making out the bill of lading to order and sending to a bank with instructions to indorse and deliver on payment of the draft attached. While that situation may be met by consigning direct to a bank, yet banks do not usually desire to render themselves liable to this extent.

To illustrate the obviously unreasonable requirements of some of these countries relating to the invoicing of merchandise, I will cite the requirements of one South American country. Shippers of merchandise must present to the consul for certification four copies of the invoice, stating the names of the shipper and of the consignee, the port of shipment, the port of destination, the class of vessel, its name, nationality, and the name of its captain. The invoice must show the mark, number, kind, and destination of each package, its contents, the exact gross weight in kilos, and its value.

The name of each kind of merchandise must be stated, without abbreviations or the use of ditto marks. The invoice must be in Spanish, and if the shippers are not acquainted with that language the consul will make a translation at a minimum charge of $3, with an additional charge of 3 cents for each line over 30. The invoice must be presented the day before the sailing of the vessel or the consignee will be subjected to penalties. Goods may not be consigned to order under a severe penalty to be imposed on the captain of the vessel and a further penalty on the consignee in the form of a surtax of 25 per cent of the duty. The merchandise must be described in the trade terms of that country, and if it should be invoiced by a name applicable under the tariff to goods of a lower classification it is liable to confiscation. If articles bearing two separate tariff classifications are packed in the same case the whole case is subject to duty at the rate applicable to the highest class in that case.

It would seem impossible to comply with all these requirements, and I am informed that nearly all importations into that particular country are subjected to some penalty for a noncompliance with one or more of these regulations.

While it is true that the regulations of this particular country are more than usually technical and apparently unreasonable in some respects, yet in other respects the regulations of other South and Central American countries appear even more discouraging to foreign commerce.

Lest I be accused of seeing too clearly the mote in our brother's eye while overlooking the beam in our own, I will say that some of the customs regula-

tions of the United States prescribed by statute are quite as unreasonable as are those of any South American country.

Under our statutes a vessel from a foreign country, bound, we will say, to Baltimore, may pass by Norfolk without even slowing up because of any customs regulation, or may even stop at Norfolk and take on coal or provisions; but if it unloads as much as one case of merchandise at Norfolk, then before being permitted to proceed it must give a bond in an amount equal to the duties on all the dutiable merchandise carried forward. In a similar manner, a vessel bound from an English port or a port in Canada or Nova Scotia to a South American port may call at one or more American ports and take on cargo, bunker coal, or supplies; but if it unloads any cargo whatever at an American port then it must give a similar bond to secure the landing abroad of all its remaining cargo.

These statutes were originally enacted in 1799, when commerce was carried on in small vessels, which might put into any shallow bay and discharge cargo without detection. A bond was therefore required to be given at the first port of call to protect the Government. This even then was an extreme measure, for if such vessels unloaded any cargo without permission from the customs authorities the vessel would be subject to confiscation, and the master and other parties concerned would be liable to prosecution. But with the present-day telephone, telegraph, and rapid transportation it would be impossible for a vessel to land cargo anywhere without detection. While, therefore, the reason for the statute has ceased to exist, the statute still remains unrepealed.

The regulation of this country, which is the cause of the greatest complaint by merchants, is that imposing penalties for unintentional and unavoidable undervaluations.

Under our statutes merchandise must be invoiced at the price actually paid therefor. The importer must, however, file an additional paper, known as an entry, stating the actual market value of the merchandise in the principal markets of exportation on the date of sailing of the importing vessel. It frequently happens that a merchant purchases merchandise at a price less than that at which similar merchandise is freely offered for sale for domestic consumption in the country of exportation and such fact is unknown to him, his sole knowledge being the price he paid. It also frequently happens that the market value of merchandise advances between the date of purchase and the date of shipment. In such cases the importer in good faith makes his entry on an invoice that correctly represents the transaction, and yet when the appraiser, as he is bound by law to do, advances the value to equal the price at which such merchandise was freely offered for sale in the principal markets of that country on the date of the sailing of the importing vessel, the importer is subjected to a penalty equal to 1 per cent of the value of the merchandise for each 1 per cent of advance made by the appraiser. While I am not prepared to say that this statute should be repealed, I have little doubt but that it might well be greatly modified, especially if its modification were accompanied by reciprocal concessions made by other countries.

Another advantage in having a uniformity of customs regulations would accrue by reason of the fact that merchants of all these countries might readily learn what is necessary in the shipping of goods abroad.

It is not necessary that a merchant know the rates of duties chargeable in quoting prices of merchandise for export, because of the fact that the consignee usually expects to pay the duties, and the prices quoted are those for the merchandise on board the exporting ship at the port of departure in this country. It is, however, essential that they should know what the customs requirements

are in relation to invoices, bills of lading, certificates of origin, and other documents required on the entry of the merchandise, because of the fact that when penalties are imposed due to inaccuracies in such documents, the consignee looks to the shipper to reimburse him and the penalties frequently are greater than the profits on the transaction. It is true that at all ports in this country there are brokers or forwarding agents who are familiar with the customs regulations of other countries, and their services may be obtained to make up invoices and other documents required. They are not, however, usually familiar with the merchandise shipped and may make errors because of that fact. To correctly invoice merchandise one must be familiar with the merchandise invoiced and also with the customs requirements of the country from which the merchandise is shipped as well as those of the country to which it is shipped. I do not doubt but that there are many who have contemplated a venture in the export trade who have given it up solely because of the various technical and apparently unreasonable requirements of the customs regulations to be met.

The second part of the question presented, whether it is possible to secure a uniformity in the customs regulations of these various countries, is a more difficult matter.

The term "port and customs regulations," as popularly understood, includes all those governmental requirements governing the arrival and departure of vessels, their anchorage while in port, their quarantine inspection, the collection of tonnage taxes, the unlading, discharge, and delivery of their cargo, the invoicing and passing of the merchandise through the customs, and the transportation and landing of their passengers.

Many of these requirements are governed by the established public policy of the particular country in which applied. However closely the countries of the Western Hemisphere may be related in ideals and purposes, the variations in their histories, traditions, social structure and institutions, and the complex diversity of their national conditions and resources all operate to establish differences in their attitude toward tariff legislation.

The quarantine regulations will depend to a large extent on the health and sanitary conditions in the particular country adopting them. Anchorage regulations will depend upon the facilities of the particular port involved. The regulations governing the invoicing and entry of merchandise will depend to some extent at least on whether applied to ad valorem or specific rates of duty. The documenting of vessels and the ascertainment of their tonnage will depend to some extent on the country's position as a maritime nation, and the treatment of commercial travelers' samples is solely a matter of public policy. There is, however, no reason and no necessity for so great a diversity in the regulations as now exist, particularly in those governing the admeasurement of vessels for tonnage and the invoicing of merchandise and its passing through the customs. Primarily, they all serve the same purpose, the protection of the revenue derived from duties on imports.

While it is possible that some variations are necessary because of the different tariff policies of the various countries, and an absolute uniformity can not therefore be expected, yet a great similarity is possible. There have been a number of conferences between representatives of the customs administration of various European countries looking to a greater uniformity in customs regulations, and while an absolute uniformity has not resulted, yet they have accomplished a very close similarity between the customs regulations of all European countries.

It is true that at an international conference held at Buenos Aires in 1910 a uniform consular invoice was recommended for adoption by all South American countries and, so far as I am informed, has not been adopted by any of them.

There are, however, many reasons why this should not be taken as final. It was a first attempt. No country was assured that if it should act any other country would take similar action. It applied only to South American countries, whereas the difficulties experienced in such regard are largely between South American countries and the United States and Europe.

At the first Pan American conference, which was held at Washington in May of this year, a joint commission was provided to secure uniform legislation on a number of matters, including in them the adoption of uniform customs regulations. The Governments of a number of South American countries have already appointed their commissions for this purpose and it is probable that some results will be achieved.

If it should be found impossible to secure an agreement of all the South, Central, and North American countries for a complete uniformity in these matters I would suggest that an endeavor be made to secure a uniformity in certain essential matters, and that to do so the customs administration of this country be requested to suggest those customs regulations of the United States forming the basis of the most frequent complaints which might be abrogated or modified as a concession in exchange for a reciprocal abrogation or modification of similar regulations of any of the other American countries, and, through the State Department, a treaty be negotiated for the reciprocal adoption of similar regulations in such regard by the two or more countries interested. It is probable that the countries entering into such reciprocal agreement would derive such commercial benefits therefrom that in a comparatively short time all countries of the Western Hemisphere would seek to enter into similar conventions. When this is accomplished it will be a comparatively simple matter, by the means of an international conference, to arrange for regulations as nearly uniform as local conditions in these various countries will permit.

It is my opinion, therefore, that both of the questions presented should be answered in the affirmative.

Mr. Chairman, while I am on my feet, if you will permit me, I desire to speak briefly and extemporaneously upon the matters that have been touched upon here in a practical way with a view to securing the results desired.

I do not believe that the time is ripe for a congress in regard to these matters. I do not believe that if the congress were called it would amount to an international tariff commission, for I may say that very few of the countries concerned have seen their way clear to adopt even national tariff commissions. I do not doubt that if the administrative authorities of the various countries could be brought together with authority and instructions to adopt uniform regulations it would accomplish all the necessary purposes of tariff legislation in those countries touching this particular aspect of the case. But I do not believe it could be done within two weeks. I have been engaged for over 12 years in the customs administration of this country. There are many of our regulations that are absolutely useless. There are some of them that I am convinced are positively harmful so far as the purposes toward which they are directed are concerned. Many of the regulations governing the movement of vessels undoubtedly were adopted for the purpose of suppressing piracy, and they have

come down to us for over 200 years in almost the words adopted in those early days.

Piracy to any considerable extent is impossible because of the quick means of communication. I will illustrate my meaning. I will say that there is a remarkable uniformity in the outlines of all these regulations of the various countries, in spite of the fact that the South American countries inherited their basic principles from the Spanish administration and the United States from the English administration. Both of them are great maritime nations; both of them in the sixteenth and seventeenth centuries had the same problems to meet, and both of them adopted pretty much the same acts. For instance, every vessel of over 5 tons must be documented; it must report to an American port at least once a year to have its document renewed, the theory being that no vessel could succeed in piratical undertaking unless it remained on the high seas for more than a year at a time. There were also regulations in regard to the nationality of the crews of vessels and various other regulations. Now piracy has disappeared and we might just as well lay those regulations aside.

Also most of our regulations in this country are statutory. If the matter were within the power of our executive department, if our executive department were given some discretion in these matters, they could very readily adopt some uniform regulations.

So my suggestion is this: Let one country make a start and make suggestions for mutual concessions in this regard, and then, when we have agreed upon something, even though it does not go to the extent of perfection, let us make a further effort to take up something else to see if we can improve some other feature of these regulations and get it through, thus making it a continuous process rather than to endeavor by means of a congress to adopt all at once a new set of regulations, imposing them upon a public perhaps not prepared for them.

Hereupon Dr. Casasus addressed the section in Spanish. (Remarks not reported.)

Mr. Julio Philippi. Mr. Chairman, I shall try to explain myself in English, although I can not speak it as easily as I can Spanish. I should like to say a few words concerning the remarks made by the gentleman who just addressed the section. He said that this is a scientific congress and that it is neither the scope nor the object of this congress to make general recommendations which may have political importance. It is very true that we are meeting here for the purpose of discussing scientifically different problems, and we should not deal with political questions, but nevertheless the question

stated here for discussion this morning is one of a practical character and we can not solve it unless we treat it in a practical way. The question is: "Is it desirable and possible to establish uniform rates, methods, and classifications in port charges, customs regulations and classifications between the North, Central, and South American countries?"

That is merely a practical question and I do not think we can discuss it in any other way.

I should also like to refer to the interesting paper which was read by Mr. Halstead and to which I listened with great interest. It proved two things: First, the absolute necessity of getting something like uniformity in this matter. It is contrary to the feelings of justice of everyone to pay such heavy penalties as people very often have to pay merely on account of their ignorance of customs regulations. Nobody can know the customs regulations in full under the laws of the 21 Republics of Pan America. Many of them are so complicated and contain so many details that it is even difficult for a man to know in full extent the laws of his own country. It is absolutely necessary to secure some degree of uniformity.

The second conclusion to which I arrive and which I have already stated is this, that this question has something of a technical character. I know something about it. I was secretary of the commission which in 1910 studied the subject at the conference of Buenos Aires; and the conclusions reached there and the recommendations made were written by me. It was stated, and I think accurately stated, that it was impossible for a conference composed alone of diplomats to discuss such a subject. Some of the delegations had technical assistance. I was the technical assistant of the Chilean Legation. The American Legation also had a technical assistant, and we worked in the best harmony, but we found that it would be impossible to accomplish a great deal unless careful preparation had been made beforehand. The first difficulty we met was that we could not get all the customs regulations of the different countries. We got the regulations of some of them, but not all of them, as we should have done, and the conference came to the conclusion that it was necessary to prepare in advance very carefully the necessary data in order to accomplish much along these lines. Therefore, I thought that the Pan American Union, which is collecting statistical data of all the various American countries, was the proper organization to undertake this work.

I suppose on this question the only answer we can give is a practical one. Therefore, if we want to answer it we have to answer it in some such form as has been indicated. This was the cause of the motion which Mr. Gonzales and I have made. We felt the Pan American

Union would be the proper organization for doing this work carefully.

The Chairman. Gentlemen, if I may be permitted to take part in this discussion, I will explain that while the remark made by the chairman of the Paraguayan delegation that diplomats do not know much about the technical question was rather sharp, it perhaps is nevertheless true. Your presiding officer has found already that there are two currents of thought noticeable in this discussion—one that the matter should be carried to a practical end and the other the opinion expressed by Ambassador Casasus in regard to discussing these questions from a scientific standpoint. I think, in connection with the motion, the question arises whether we should make recommendation at this session, or shall we simply discuss the subject? As there is present a gentleman who is considered an authority on this special branch—Hon. Andrew J. Peters, Assistant Secretary of the Treasury of the United States—I will ask him for his opinion about the subject and whether he thinks it would be better to discuss the matter academically or from a practical point of view.

Mr. Peters. Mr. Chairman, I have listened with very great interest to what has been said, and it seems to me that we are touching on a subject of the very greatest importance to the relations between the Republics of the Western Hemisphere. If it is our purpose to make their personal relations and the relations of their people closer and to produce a better understanding between them, we want to make our commercial relations run in the smoothest channel, and we want to remove all causes of misunderstanding.

No cause can give more irritation or can tend to a greater degree to prevent the free flow of commerce than the uncertainties and restrictions incident to the customs requirements of the various countries. In this statement I do not by any means exclude the United States, but I refer to all the countries of the Western Hemisphere. It seems to me that this gathering can do no greater service than to attempt to take a step forward in the direction which is proposed.

Of course, the changes would be under two heads. There would be changes in rates; and rates are often determined by local conditions, or, as a gentleman preceding me has pointed out, by the degree of development which various countries may have undergone. The requirements, however, as to invoices, as to methods of entry, as to the manner in which goods should be packed, as to the methods and form of clearing, and of determining market values, it seems to me, could well be uniform. And I am of the opinion that we are on the verge of facing a situation from which we may well expect affirmative action in this particular.

Of course in recommending tariff changes we do verge on the dangerous ground of political questions, which I know we all desire

to avoid. On the other hand, it seems to me the great question, the big view of it—and I am sure that every political party would endorse this idea—is that of producing better commercial relations. One party might believe that a higher or a lower tariff rate was necessary, but, it seems to me, with the general proposition no one can can take issue, i. e., that we should try to take a step forward so as to improve our relations so far as commerce and tariffs are concerned with the countries of the Western Hemispere.

To do this we do not have to recommend rates, but one of the first things we should do is to bring vividly before the people the necessity for this action; and I believe as this subject has come up here before the section, it would be well within the purposes of this gathering that action should be taken and that the section should attempt to make a suggestion giving its views on this particular subject presented. I am sure that the members of the Joint High Commission have the intention of making some recommendation in regard to this matter, and I believe that an action by this congress on the subject would tend to strengthen their hand and tend to present the question more strongly and affirmatively to the people of the Republics interested.

The CHAIRMAN. If there are no further remarks the chair will put the question to a vote.

Mr. PHILIPPI. Mr. Chairman, allow me one more remark.

The CHAIRMAN. Certainly.

Mr. PHILIPPI. I am sorry to intrude so long on the attention of this meeting, but I was very glad to hear the statement made by Mr. Peters that the question of customs regulation is or can be divorced from the question of tariff regulation. It is necessary to insist before the public that they are two different questions. Tariff questions are questions of political policy, which are different for every country, and every country is sovereign in such matters, and no one, of course, would undertake to interfere with the policy of another country or to impose his tariff views on another country whether he be a believer in protection or free trade. We only speak here about questions of customs regulations, and it is important to make a distinction between the two questions, because people in general probably are of the opinion that there may be some political danger in connection with a subject of this kind when in fact there is no danger at all. I merely wanted to make this remark. Further, I should like to say that our recommendation that the material for a discussion of the subject should be gathered together; whether it be by the Pan American Union or some scientific society is not a political question of any importance. The only thing we want to have is the material brought together in convenient form so that it can be studied anywhere.

Mr. Halstead. Mr. Chairman, if I may be permitted again to take the time of the section, I desire to emphasize a statement made by the gentleman from Chile that the customs regulations which are the source of the difficulty have almost nothing to do with the tariff legislation of the various countries. A country may have a protective tariff or a tariff for revenue, or it may have absolute free trade, and yet it must have customs regulations. If merchandise is brought in, if that country is to compile statistics of its imports and exports, it must have certain formulas necessary to be complied with on the introduction of merchandise. Nothing that I have said is intended at all to apply to the tariff policy of the various countries.

It is true in this country, and it is true also of many of the South American countries, that many of the regulations which are the source of complaint to-day had their beginning over a hundred years ago and have never been subjected to anything like a scientific examination to adjust them to present commercial conditions.

I am not a scientist, and inasmuch as I am a practical man I should like to make a suggestion. There is no question that this work should be done. Upon that I think we are all agreed. The only question is, may it be done, and, if so, how? It seems to me that it would be well within the scope of this congress to make a suggestion as to how it might be carried out. We have fortunately a permanent tribunal which, while perhaps it can not carry this out, nevertheless it can see that it shall be done. I refer to the Pan American Union. I believe that if they would take the matter up and keep it active with the various Governments it would be found possible and advisable to have a conference between the customs administrations of the various Governments to see if they could get together in regard to modifications which might be made as mutual concessions. In this way something practical might be done, and, as I understand, the motion before the section is to the effect that such be the recommendation of this gathering. Therefore I wish to agree with that.

Mr. Casasus addressed the section in Spanish, but his remarks were unfortunately not reported.

The Chairman. Gentlemen, you see that there is a question of principle established by Ambassador Casasus in regard to the topic which has been put before you, namely, "Is it desirable and possible to establish uniform rates, methods, and classifications in port charges, customs regulations and classifications between the North, Central, and South American countries?" Ambassador Casasus seems to think that we are departing from that general question to enter into, although with the best intentions, the practical field of recommendations.

Mr. Pedro J. Cuadra Ch, of Nicaragua, addressed the section in Spanish at this point. (His remarks were not reported.)

Mr. PHILIPPI. Mr. Chairman, may I speak further? I had some experience in connection with the last Scientific Congress at Santiago. There they made many practical recommendations such as the one under discussion. The topic proposed for discussion is so simple that in fact I can not believe it would have been put before this section if it were to be answered only with a "yes" or "no," provided there were some practical solution of it. I do not see that there is any political danger involved in merely making a simple recommendation calling for the gathering of material. Rather than to answer the question proposed with "yes" or "no," I think it worth while that something concrete should be brought before the section, and therefore I think it advisable to make the recommendation which I have made with Mr. Gonzales.

Mr. GONZALES. Mr. Chairman, I am sorry that I have created all this trouble, because, after all, it was following the paper of Mr. Reinoso that I made the suggestion. I am very sorry that we do not all agree. We are not discussing anything that pertains distinctly to any one of us. It is for the general good.

I acknowledge that this is a scientific congress, but what is the use of science? It is only to achieve practical results, and that is what we are attempting to do. I attended the Pan American Financial Congress, the practical result of which was to provide some other means of accomplishing what was desired by creating the High Commission. I was a member of the subcommittee that proposed the creation of that commission, and I suggested that they make a small practical body that would carry the matter through, and a new office was created in the Pan American Union for the purpose of doing what the International High Commission is not going to do. So I would like, if we could obtain the concurrence of Dr. Casasus, with whom I should like always to agree, to adopt some practical resolution, and not, as Mr. Philippi says, merely say "yes" or "no." We would show very poor judgment if we only said "yes" or "no."

The CHAIRMAN. If I may be allowed to make a suggestion, perhaps at the risk of not being altogether impartial, I may say that I lean toward the view of Ambassador Casasus, that it is hardly in the purview of the section to make recommendations, because the topic proposed for discussion reads, "Is it desirable and possible," and so forth. It says nothing about recommendations; but I think, perhaps without going as far as has been proposed, a practical view may be taken of the question, and in that opinion I think Ambassador Casasus will agree.

Mr. SELIGMAN. Mr. Chairman, I desire to make the suggestion that, in order to bring these dissenting opinions into unity and harmony, we can really accomplish what both of the gentlemen want. The question is, "Is it desirable and possible to establish uniform rates, methods, and classifications in port charges, customs regulations and classifications between North, Central, and South American countries?" Could not the proposed resolution read in this way: "It is the opinion of this congress that it is desirable and possible to establish uniform rates, etc., and in view of that fact we recommend so-and-so"?

We should not then go on with the remainder; in other words, it will combine both views, and we would declare our opinion, answering the primary question that it is desirable, and at the same time we would——

The CHAIRMAN. Take a step farther.

Mr. SELIGMAN. Yes; we should take a step farther.

Dr. Casasus again addressed the section in Spanish. (His remarks were not reported.)

Mr. PHILIPPI. Mr. Chairman, I think the work we are doing in the matter of customs regulations is not absolutely useless. I know, in fact, that very few of the recommendations have been considered, but I know that one or two of the Latin-American countries have adopted the recommendations of the Congress of Buenos Aires and that in several other countries the question has been studied. These things go slowly. We can not expect to see results from one year to another, but in 10 years, or 15 years, or 20 years, or 50 years, we shall see the result. This work, slow as it is, I hope and believe will in time show great results, although we can not see them from one date to another. On this subject, if we can recommend the preparation of the work, I think we will do what should be done at the beginning.

The CHAIRMAN. I believe that Ambassador Casasus agrees with that, but differs as to the question of principle involved.

Mr. CASASUS. Yes.

Mr. SELIGMAN. May I ask, Mr. Chairman, whether the esteemed ambassador has fully in mind the fact that it is the custom in scientific congresses frequently to do more than give a scientific opinion on a controverted question? I refer, for instance, to the International Statistical Congress. Perhaps some of you gentlemen are members of that body. I refer to a great many other congresses such as those that take place in this country. It is indeed true that the primary function of a scientific congress is to prepare the public mind by the elucidation, by the setting forth of and explanation of certain principles. It is the real work of science, of course, to explain a thing

and to bring it before the public; but it not infrequently happens that scientific congresses go a step further, and, in view of the importance of scientific treatment upon practical life, they not infrequently recommend that certain definite things be done, or, at all events, that certain definite steps be taken to collect material and to prepare the minds of the public and legislators for further action.

As I understand, the object of the pending motion before the section is really not political, but it is scientific. It is scientific in this respect, that they make a recommendation not simply that we approve in general terms of a broad principle (most people would, without discussing it, approve such a broad principle), but as a scientific body we recommend a further study of the problem in a particular way. We recommend not that Chile, Argentina, or the United States, should do so and so—that would be political—but we recommend that steps be taken to collect further information in order to enable us or to enable some other congress or some country in the future, if it so pleases, to take some definite action.

It seems to me, sir, that we are remaining simply within the province and purview of this congress as a scientific congress when we make a recommendation for further scientific study.

I think we must make a distinction between a recommendation such as has been proposed and one for definite political action, which is out of the question. I quite agree with you, sir, that that would be impossible; but what we are recommending is to do something more than simply state that we believe in so and so. We believe in it, and therefore we recommend that further steps be taken to study the problem; and that, sir, seems to me to be a recommendation in entire harmony and in entire consonance with our duties as a scientific body. I hope that our esteemed friend, Dr. Casasus, will look at it in that light and withdraw his objection, and that, if we can all agree, that we may make recommendations which are of a strictly scientific and not of a political nature.

Mr. Casasus. A motion made in that way would be acceptable to me, although I think it would hardly be in conformity with the natural powers of a scientific congress.

Mr. Philippi. I accept with pleasure the suggestion which has just been made.

The Chairman. The secretary will read the motion as originally presented by Mr. Gonzales.

Mr. Gonzales. If I may be excused, I think the motion as now proposed by Prof. Seligman should be read.

Mr. Seligman. All I desire, sir, is to accept as far as possible the language which you have framed and simply change it by the addition of a few words so as to meet the objections which have been interposed.

Mr. GONZALES. I think the form in which Prof. Seligman stated it was admirable, and I think we should vote on that.

Mr. SELIGMAN. Mr. Chairman, I will make this motion:

That it is the sense of this section that it is desirable and possible to establish uniform rates, methods, and classifications in port charges, customs regulations, and classifications between the North, Central, and South American countries, and that, in view of this opinion, it is the sense of this section that it is desirable to make a more careful study of existing port charges and customs regulations in the Western Hemisphere.

Before proceeding further to state the motion I should like to ask whether it would meet the wishes of the gentlemen to state that this study be made under the auspices of some particular body?

Mr. GONZALES. I think it might be well to commend the study of it to the Pan American Union.

Mr. CASASUS. That is what I do not like, because I do not think we have the right to impose upon the Pan American Union such a task. We can recommend, as has been said, the collection of all these data and that a special congress be held so as to take this matter up in a practical way.

Mr. SELIGMAN. Would you object, sir, to putting it in this way: Not that we make any recommendation that the Pan American Union should do any particular thing, but that we might recommend the union to consider the advisability of so doing and leaving it to them to decide?

Mr. CASASUS. Certainly; and then let the various Governments hold a special congress so as to take the matter up.

Mr. SELIGMAN. Then I will put it in this way:

Resolved, That this section recommends to the Pan American Union the question of the advisability of collecting this information and of calling the attention of the respective countries to the importance of the matter.

That is to say, sir, the idea would be that we do not do anything particular here; we go out of existence; we have no machinery for asking anyone to collect this material, but we ask the Pan American Union, "Will you please consider whether from your point of view it is wise for you either to make this collection yourself or to ask the separate countries to begin to do it?" Perhaps we could put it in some other way, sir.

Mr. CASASUS. Perhaps I have not expressed clearly all of my idea. I consider that we have not the right to impose such a task on the Pan American Union—a body composed of the representatives of all the American countries. I agree that it is appropriate to declare that it is desirable and possible to adopt uniform rules and regulations of customs and to express the opinion that it would be also desirable that the governments take the matter up afterwards and call

a special congress to which the matter will be submitted in a practical form.

Mr. HOLLANDER. Mr. Chairman, may I suggest that a useful procedure, at least one which the section might consider, would be the appointment of a committee on resolutions to whom a matter such as this which we have now been discussing, and as to which the issue is joined with such precision that I fear agreement upon language will be extremely difficult, should be referred? We shall have a number of such resolutions coming up for action; perhaps each session will present one, and uniformity, and I believe agreement, can better be reached in the informal conference of such a committee upon which representation shall be had by the several countries represented. Accordingly, Mr. Chairman, if it be agreeable to the section, I should like to propose that the chairman of the section be requested to constitute a committee on resolutions to whom shall be referred this and all similar proposals emanating from the section, such matters to be considered at leisure and in intimate discussion by the committee, and to be presented for adoption or otherwise at the final meeting of the section.

Mr. GONZALES. I think that is a very practical solution of the matter.

The CHAIRMAN. I see by your applause that you agree with the proposal of Prof. Hollander. My embarrassment now is to decide whom to appoint on that committee, and in that respect I crave your indulgence. I appoint Ambassador Casasus, Mr. Philippi, and Prof. Seligman to be members of the committee on resolutions of the section. I do not know whether I should put the pending motion to a vote, since we can not agree upon it.

Mr. CASASUS. That has been taken care of.

Mr. HOLLANDER. May I make a further suggestion?

The CHAIRMAN. Certainly.

Mr. HOLLANDER. I should like on behalf of the American Economic Association to make more emphatic and perhaps more intimate the formal invitation which is already incorporated in the program of the section. In accordance with the plans of the section the meeting this afternoon, to-morrow morning, and the social gathering to-morrow night, and the meeting on Friday morning, will be held with the American Economic Association. The members, and in particular the foreign members of the section, are to be the guests of the association. The association is a large body, and a considerable part of the membership is present. That makes the desired personal contact a little more difficult, but at the meeting of the association this morning the most cordial and affectionate sentiments were expressed and a committee composed of distinguished members of the association was appointed as a committee on hospitality and fraternity. I

trust the members of the section will cooperate in making easy the labors of this committee. Unfortunately not all of them are acquainted with you personally, but their desires are cordial and if you will facilitate their efforts by the waiving of a little ceremony in making yourselves known or by making it easier for the officers of the association to know you, you will aid in accomplishing the purpose which we really have in view—namely, a greater intimacy between the economists and the students of economic questions in North and in South and in Central America.

Mr. SELIGMAN. I move that the morning session of Section IX adjourn.

The CHAIRMAN. Before the motion of Prof. Seligman is put I wish to thank you for your kindness and the forbearance you have displayed toward one so incompetent to serve as your presiding officer of this morning. It has been really the beginning of his functions as a presiding officer except over academic discussions, and it is probably for that reason that I had such a strong leaning toward the claim of Ambassador Casasus that we should not make recommendations but should simply stand upon the question under discussion.

I trust that the next session will be just as profitable as this one has been, and I hope that you will have a better and perhaps a stronger hand in the presiding officer's chair. I know you will find in your other chairmen the same good heart and the same hearty wishes for the success of your deliberations that I have had. Gentlemen, I thank you.

Mr. GONZALES. I move that a standing vote of thanks be given to our chairman of this morning, His Excellency Domicio da Gama.

Mr. HOLLANDER. I second the motion.

The motion was unanimously agreed to.

The CHAIRMAN. The question now is on the motion of Prof. Seligman that the morning session adjourn.

The motion was agreed to, and at 12.20 o'clock the morning session adjourned.

SECTION IX—GUEST OF THE AMERICAN ECONOMIC ASSOCIATION.

RALEIGH HOTEL,
Wednesday afternoon, December 29, 1915.

Chairman, BALTHASAR H. MEYER.

The meeting was called to order at 2.30 o'clock by the chairman.

Papers presented:

Economic theories and scientific progress, by J. H. Hollander, Johns Hopkins University.

The rôle of money in economic theory, by W. C. Mitchell, Columbia University.

SECTION IX—GUEST OF THE AMERICAN ECONOMIC ASSOCIATION.

RALEIGH HOTEL,
Thursday morning, December 30, 1915.

The meeting was called to order at 10.30 o'clock by the chairman.

Papers presented:

Maintenance of retail prices, by Frank W. Taussig, Harvard University.

Some problems and principles of government regulation of railroads, by Emory R. Johnson, University of Pennsylvania.

The papers by Profs. Johnson and Hollander were presented for publication in the Proceedings of the Second Pan American Scientific Congress.

ECONOMIC THEORIZING AND SCIENTIFIC PROGRESS.

By JACOB H. HOLLANDER,
Professor of Political Economy, Johns Hopkins University.

Since the organization of the American Economic Association 30 years ago, there have been but two of its 25 scientific meetings at which one session at least has not been devoted to theoretical discussion.

This prominence reflects the continuing interest of American economists in social speculation. The conspicuous place of theoretical papers in journal literature, the considerable proportion of expository treatises among formal publications, are counterparts of the same phenomenon.

The degree of absorption has varied from time to time. In 1880 Cliffe Leslie, echoing Dunbar, summed up the history of American political economy in the sentence "the United States had done nothing toward developing the theory of political economy."[1] The reflex of the animated controversies as to scope and method among English economists of the late seventies and, more notable, the arrival and activity in the United States of a group of German-trained scholars effected a virtual renaissance in American economic thought in the early eighties. The dominant characteristics of the phase were an avowal of the historical-inductive method and an election of concrete problems for study.

The historical movement reached its high-water mark in the United States in the formation of the American Economic Association in 1885. But in this achievement the tendency spent itself. Stirred by militant challenge, heartened by clearness of issue, supplied with convenient channels of publication, the group

[1] "Political Economy in the United States," in Fortnightly Review, October, 1880; reprinted in Essays on Political Economy (2d ed., Dublin, 1888), p. 128.

of thinkers to whom the work of Roscher, Cliffe Leslie, and Ingram seemed amendatory rather than revolutionary, drew to the fore. The impulse took form in the founding of the Quarterly Journal of Economics in 1886, with Dunbar's fine inaugural on "The Reaction in Political Economy" sounding the keynote.

The doctrinal controversies of the next half dozen years centered about the contributions of Marshall and Walker. Not since Ricardo's time had such coherent theories of value and distribution been enunciated. The gap which the discrediting of the wage-fund theory had left was filled by attractive formulæ, and recognition of the entrepreneur function and its reward met the demands of modern industrialism.

Marshall's Economics of Industry had appeared in 1879 and Walker's Political Economy in 1883, without appreciable effect. Now, however, Marshall's election to the chair of political economy vacated by the death of Fawcett called attention to the novel elements in his doctrines; while Walker, aroused by Sidgwick's strictures, reiterated in incisive form the controverted elements of the wages question. The publication of Marshall's Principles of Economics, in 1890, marked the climax of the debate. With it and the discussion immediately tributary a lull was reached in economic controversy.

But the respite was brief. The same year, 1890, in which Marshall's Principles was issued, the English translation of Böhm-Bawerk's Capital and Interest saw light, heralded, indeed, a year before by Bonar's admirable critique of the Austrian school. In quick succession followed Böhm-Bawerk's Positive Theory of Capital and Wieser's Natural Value in English translation, with Smart's handy Führer as a résumé. An outburst of controversial activity ensued, unparalleled in the history of American economic writing. During the nineties this sustained contest—exhibiting every variety of intellectual effort from stimulating analysis to hypercritical dialectic—raged about the Austrian doctrines.

Through sheer exhaustion of disputants—and witnesses—the struggle had abated when in 1899 Clark's Distribution of Wealth summarized with rare amenity of form the speculations of a profound philosopher and an inspiring teacher. The effects were wide conversion and ardent discipleship. For a decade Clark's theories dominated economic philosophy in the United States, weakening only with increasing resort to realistic studies and growing uneasiness as to the value of theoretical inquiries.

Walker, Böhm-Bawerk, and Clark thus constitute the major episodes in the 30 years of American economic speculation. There have been minor incidents—the debate over the scope and method of sociology in 1895–1898; the discussion as to the order and form of economic instruction in 1912—but these stand in immediate relation to local or temporary events.

The scientific results attained in the quarter century have not been commensurate with an incessant doctrinal activity. The devotees of a science are notoriously incompetent to pass judgment upon its contemporary phase. There is likely to be either unwarranted depreciation or complacent overestimate. This is as true of the physical as of the social sciences. If, in our own day, Jevons reduced "the mazy and preposterous assumptions" of the Ricardian economics to "the fragments of a shattered science," so, in medical science, Osler has spoken of "an art which is still deep in the sloughs of Empiricism."[1]

But the depression which many American economists feel as to the present state and tendency of the science is something more than this habitual depreciation. It is born of the conviction that economic science as pursued in

[1] "The Army Surgeon" in Aequanimitas (2d ed., Philadelphia, 1906), p. 112.

the United States has been infected by unsound method; that the productivity of scientific labor has been thereby impaired; and that a further diversion of energy into barren and profitless areas is threatened.

Following the example of the great masters of our science, influenced by the teaching of formal methodologists, American economists who have devoted themselves to economic speculation in the past 30 years have used a dominantly deductive method.

There can be no quarrel with this procedure. It has the advantage of precedent on the part of economists from Dugald Stewart to Alfred Marshall; of approval on the part of logicians from Archbishop Whewell to Prof. Keynes; of successful resistance to methodological attack from Richard Jones to Gustav Schmoller.

The real charge against American economic speculation is not that it has made use of deduction but that it has made use of it wrongly and defectively. The indictment lies, in strict accuracy, not against erroneous method, but against imperfect employment. The justice of this criticism can be best tested by projecting the evidence to be reviewed against the background of accepted, even though familiar, opinions as to scientific method.

The material of any positive science is a body of related phenomena subject to uniformity as to identity and sequence. Scientific progress consists in the increasing formulation of such uniformities as hypotheses, in tentative statement of them as theories, and in ultimate demonstration of them as laws.

The orderly procedure whereby this end is sought, we have been taught for years, is the method of science—not of a science, but of science. In complete form it consists of three steps—observation, inference, verification. Observation and inference give us hypotheses; verification converts the tentative formulations into theories and ultimately into laws. To those whom the gods elect the hypothesis comes lightly by intuition or imagination; to coarser clay the way is steep and hard—by induction from assembled particulars, by deduction from admitted or established generalizations.

Marked differences of opinion—accented sometimes into acrimonious controversy—have developed at intervals as to the relative order and prominence of the several parts of the inferential process. Deductive, inductive, historical, comparative, statistical, mathematical, are terms descriptive of the varying emphasis. The outcome has been virtual agreement that there is a constant alternation of the processes of induction and deduction in the actual conduct of scientific inquiry, and that in this "interlacing" historical experience, comparative elimination, statistical uniformity, and mathematical ratio have part.

Whatever difference of opinion may have prevailed as to the order and emphasis of the several elements in the reasoning stage of scientific speculation, there has always been agreement that the third step, verification, formal and deliberate—"the process of testing, by means of an appeal to facts, the validity of the conclusions already arrived at by a course of deductive reasoning"[1]—is an indispensable requisite in the transition of an hypothesis into a theory and of a theory into a law. Without it speculation is an intellectual gymnastic, not a scientific process. Mill likened the distinction to that which exists between the Aristotelian physics and the Newtonian theory of the heavens.[2] In our own speech it is the contrast between the political arithmetic of Petty

[1] Fowler, The Elements of Inductive Logic (3d ed., Oxford, 1876), p. 244. So, too, Dunbar (Quarterly Journal of Economics, I, 5): "The verification of results reached by deductive reasoning should call for as patient collecting and as conscientious sifting of facts as any other use of observation."

[2] System of Logic (2d ed., London, 1846), I, 579.

and the statistical studies of Pearson. The chemist, the physicist, the physiologist, venturing to propound a new theory without confirmatory evidence, is discredited as an investigator and laughed out of court as a scientist. If recourse can not be had to observed facts for verification—as often in certain of the physical sciences, astronomy and geology—the hypothesis remains hypothesis, plausible, perhaps, but tentative none the less until the disclosure of additional facts by some new instrument of precision, by some abrupt discovery of evidence, affords material for the lacking test. The investigator "makes intellectual keys," declares a recent writer upon scientific method, "and then tries whether they fit the lock. If the hypothesis does not fit, it is rejected and another is made."[1] That the scientific workshop is full of such "discarded keys," Pearson reminds us, was stated finely even a generation ago by Faraday: "The world little knows how many of the thoughts and theories which have passed through the mind of a scientific investigator have been crushed in silence and secrecy by his own severe criticism and adverse examination; that in the most successful instances not a tenth of the suggestions, the hopes, the wishes, the preliminary conclusions have been realized."[2]

The question remains whether formal verification—however essential in the physical sciences—be either a possible or a necessary element in economic inquiry. As to the needlessness of formal verification, the implication seems to be that the economic investigator is equipped with such a range of general information that automatically he will reject a hypothesis not in harmony with the facts. This smacks much of the disposition of the uninformed to declare that the frequency distribution of two groups of data is identical because the curves look alike.

The consideration as to the impossibility of formal verification traces back to the contention of Mill[3] that direct verification in the social sciences is impracticable, because of the absence of "previous empirical generalizations," and because of the inability to compare the hypothesis with individual experiments or instances of like circumstance. But Mill was concerned less with the establishment of social uniformities than with the predictions of social theory, and even here he insisted that while direct verification is impossible, there is "an indirect verification which is scarcely of less value and which is always practicable"—the process whereby the conclusion drawn as to the individual case is "verified indirectly by the verification of other conclusions, drawn in other individual cases from the same laws." Formal logicians have gone even farther in this process of qualification, without waiving the essential consideration: "Verification is not a distinct mode of proof," Fowler maintains, "but is simply a confirmation of one proof by another, sometimes of a deduction by an induction, sometimes of an induction by a deduction, and finally, sometimes of an induction or deduction by another."[4] Proof—not any particular mode of proof—is the essential requisite of scientific thought.

All said and done, the consensus of opinion among logicians and scientists may fairly be described as follows: The economy of intellectual effort demands that any hypothesis as to an existing uniformity or a causal relation among a body of facts shall before presentation as a scientific contribution be verified by experiment, by specific instance, or by logical equivalent. If experience be the necessary resort, the mere circumstance that the facts are complex or difficult of access does not relieve the investigator of his responsibility. He must ex-

[1] J. A. Thomson, Introduction to Science (New York [1911]), p. 69.

[2] Quoted in The Grammar of Science (3d ed., London, 1911), p. 32, and by Thomson, op. cit., p. 26.

[3] System of Logic, II, 588–590.

[4] Elements of Inductive Logic, p. 249.

haust the possibilities, state frankly what he has done, and qualify his inference accordingly.

We are now prepared to formulate the indictment: Economic speculation in the United States has been marred by the omission, deliberate or unwitting, of verification—the comparison between the conclusions of reasoning and the results of observation. In so far, it has partaken of the character not of economic theory but of economic theorizing.

In passing to a bill of particulars, the critic suffers the woe of an academic ingrate mingled with the remorse of a doctrinal patricide. The challenged are the *dei majores* among American economists of our generation—the men whom we delight to honor as scholars and as teachers. If the sword be now raised against them, it is in no spirit of filial impiety but in the sure faith that they who have taught us to forge its strength and to whet its edge will be the first to cry that it be wielded if true cause arise.

From out the mass of theories enunciated by American economists of the present generation I have selected four notable doctrines—notable in the sense of formal issue, wide diffusion, critical discussion, and doctrinal influence: Henry C. Adams's theory of constant returns; Simon N. Patten's theory of consumption; John B. Clark's theory of wages; E. R. A. Seligman's theory of tax incidence.

Henry C. Adams's theory of constant returns was given full expression in 1887 in a compact monograph, "The relation of the State to industrial action,"[1] as part answer to the query (p. 54) "Is there any principle according to which industries may be classified so that the statesman can easily determine what lines of business should be brought under the rule of public financiering?" Rejecting the laissez-faire device of delay until actual experience of ill, Adams proposed by "the scientific analysis of industrial relations to determine with some degree of accuracy" the nature of this principle. The subsequent argument can be set forth by direct citation (p. 55): "All industries, as it appears to me, fall into three classes, according to the relation that exists between the increment of product which results from a given increment of capital or labor. These may be termed industries of constant returns, industries of diminishing returns, and industries of increasing returns. The first two classes of industries are adequately controlled by competitive action; the third class, on the other hand, requires the superior control of State power."

Then passing specifically to the composition of the first class (p. 55): "All those businesses in which success depend largely on attention to detail, and where the personal element of the laborer is brought prominently into view, fall under this class. For example, the retail business of merchants is subject to the rule here stated. * * * There can, therefore, be no motive for endeavoring to apply the rule of public financiering to businesses of this sort."

Prof. Adams has here conformed to the first two stages of scientific reasoning, observation and inference; he has ignored the third, verification. From the days of Ricardo and Senior, industries of diminishing and of increasing returns have been recognized as valid corollaries of the law of diminishing returns and the principle of monopoly gains. The recognition of an intermediate group subject to a law of constant returns and the assignment thereto of the great body of industrial enterprises constituted a distinct hypothesis. However legitimate as a tentative assumption, attained by elimination or deduction, such an hypothesis could be properly set forth as an economic law only after the amplest proof by reference to actual facts—in this particular case both existent and accessible.

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[1] Publications of the American Economic Association, First Series, Vol. I, No. 6.

Simon N. Patten's theory of consumption, enunciated in The Consumption of Wealth[1] in 1889, is a bold and courageous venture exhibiting in his most characteristic speculation the form and mode of the author's reasoning process. The starting point is the proposition that (Introduction, v) "while production is determined by consumption; the latter is itself largely modified by the former." The problem is explicitly conceived as (ib.) "to bring all those facts into harmonious relations to one another which throw light upon the laws regulating the consumption of wealth." Deduction is elected as the mode of investigation since the data are primary facts of human nature and social organization, and warning is served that the ultimate laws are likely to be obscured by disturbing causes and counter forces.

But the method pursued and the result attained fall short of such formal avowal of plan and purpose. By indulgence in conjectural history, "tracing the past development of man" (p. 9) or going "back to primitive times" (p. 24), by resort to free speculation unchecked by attempted proof, Prof. Patten gives us brilliant hypotheses and stimulating conjectures—but not established principles.

In declaring, as a primary or ultimate law of consumption that (p. 13) "With every increase in the variety of our food the intensity of pleasure derived from the food must be reduced; so that, when the system becomes accustomed to the new diet, the point of satiety will be reached sooner than was formerly the case," or in stating as the economic, in contrast to the natural, order of consumption that (p. 19) "A man under economic conditions will first choose that article which has the highest ratio of pleasure to pain, and then other articles will be chosen in that order which allows the highest ratios to stand first," there is no trace of that deliberate reference to positive phenomena for verification, amendment, or rejection which constitutes an essential of scientific thought. If the propositions be true, they attest the profound insight, the rare intuition, the fertile imagination, and the signal good luck of a gifted philosopher. Like Galileo he will have "used method by genius." If the propositions be false they afford new evidence that philosophical accident may not be relied upon to replace logical method, and that ordinary men can hope to rival Galileo only by using the rules which he could neglect.[2] To economic science the real injury is the complete uncertainty in which we are left as to whether the propositions are true or false.

John B. Clark's theory that the specific productivity of labor fixes wages embodies the essential concept of the author's economic system—the doctrine of imputation. With rare intellectual tenacity Prof. Clark has here constructed a "homogeneous hypothesis" as to the phenomena of economic distribution, not by reference to such facts, but by large reliance upon the legal concept and social institution of private property. As from the earliest recognition of private property in economic relations, man obtains the full fruit of his exertion as reward, so in the most highly developed industrial society the labor unit tends to receive as wages an amount equivalent to the value of the product created by "a final unit of social labor."[3]

From the days of Aristotle analogical reasoning has been a recognized mode of inference. The geologist infers the efficient causes of events that happened in the Devonian age from the consequences of particular happenings to-day. Darwin formulated theories as to variations which might have occurred in un-

[1] Publications of the University of Pennsylvania: Political Economy and Public Law Series, No. 4 (Philadelphia, 1889).

[2] Cf. Case, "Scientific Method as a Mental Operation" in Lectures on the Method of Science (ed. T. B. Strong, Oxford, 1906), p. 11.

[3] The Distribution of Wealth (New York, 1899), p. 168.

thinkable distant aeons from the particular variations which he observed in his domesticated pigeons and cultivated plants.[1] But analogy, even though often the only recourse in reasoning from the present to the remote, from the accessible to the inaccessible, can never yield anything more than an hypothesis. Even then the way is beset with peril. "It is a common error," warned Rowland the great investigator, "which young physicists are apt to fall into to obtain a law, a curve, or a mathematical expression for given experimental limits and then to apply it to points outside those limits. This is sometimes called extrapolation. Such a process, unless carefully guarded, ceases to be a reasoning process and becomes one of pure imagination, specially liable to error when the distance is too great."[2]

With respect to contemporary social phenomena, the validity of an analogical hypothesis is established not by flawless inference and lucid exposition but by the bare hard test: Is it the simplest theory available for explaining the facts? Like the mechanical hypothesis of modern physical science it fulfills its purpose only when its "conjectural attributes explain in the simplest and most plausible way the largest body of known phenomena and when they anticipate phenomena afterwards observed."[3] The theory of specific productivity was propounded void of any such test. How signal was the omission is suggested by the brilliant attempt of an accomplished disciple 11 years later to repair the defect.

Prof. E. R. A. Seligman's theory of the incidence of taxation, as presented in 1892 and revised in the successive editions of The Shifting and Incidence of Taxation in 1899 and 1910 may reasonably be described as the most ambitious attempt at economic deduction made by an American scholar of our generation. Prefaced by an imposing historical review of the literature of the subject—past and present, deliberate and incidental, domestic and imported—the essay should be free from at least the fundamental errors of method which the author's profound erudition and critical acumen have detected so unerringly in the writings of others.

If Ricardo's doctrine of incidence, "called par excellence the absolute theory," be incomplete in failing (p. 151) "to notice the practical effects of economic friction," with the result that (ib.) "It might perhaps be true so far as it went, but it would even then not go far enough to explain actual phenomena," the theory which is to replace it should certainly escape the same pitfall of defective method. Yet in this respect—the failure to submit conclusions to verification and test—Prof. Seligman's analyses are glaringly Ricardian. His assumptions, it is true, are not the few simple premises of Ricardo, but a body of empirical generalizations that incorporate certain of the characteristics of the modern industrial system. But his conclusions are none the less unverified hypotheses.

Here and there detached facts are cited in illustration. Where "a careful statistical investigation" (p. 334), "a more recent inductive verification" (ib.), "a more recent investigation" (p. 335), are conveniently at hand—as in the case of the taxation of mortgages—the results are used to test the conclusion. But beyond this, and occasional bibliographical references to (p. 372) "inductive statistical studies" of the incidence of other taxes, there is no attempt to establish the validity of hypotheses by appeal to facts. The author, fully alive to the purpose of such procedure, seems to feel himself absolved by the adequacy of his premises, the certainty of his inferences,

[1] Thompson, op. cit., pp. 58–59.

[2] "The Highest Aim of the Physicist" in Johns Hopkins University Circular, March, 1900, p. 19.

[3] L. T. More, The Limitations of Science (New York, 1915), pp. 15, 27.

the guarded application of his conclusions, from the necessity of undergoing the drudgery and detail that verification involves.

Grave as has been the direct harm to the progress of economic science by faulty method, the larger injury has been the unwholesome influence exerted by example upon students, devotees, and disciples. This has taken the form of (1) the encouragement of commentation, (2) the vogue of textbook writing, (3) the tolerance of metaphysical controversy as to final terms and ultimate concepts.

1. Historians of scientific thought describe as "the commentatorial spirit" that disposition among scholars to lean on the authority of earlier thinkers, "to study the opinions of others as the only mode of forming their own; to read nature through books; to attend to what had been already thought and said rather than to what really is and happens." This "reign of mere disputation"[1] has been recurrent in the history of thought and always with unfortunate result. "The wavering abstractions, indistinct generalizations, and loose classifications of common language," records Whewell, were "the only source from which the schoolmen of the Middle Ages drew their views, or rather their arguments; and though these notional and verbal relations were invested with a most complex and pedantic technicality, they did not, on that account, become at all more precise as notions or most likely to lead to a single real truth. Instead of acquiring distinct ideas, they multiplied abstract terms; instead of real generalizations, they had recourse to verbal distinctions. The whole course of their employments tended to make them not only ignorant of physical truth but incapable of conceiving its nature."[2]

A kindred mode of intellectual activity has engaged American economists of our own generation to a very considerable extent. It has given us that "scientific snobbishness" which M. Poincaré warns us "is so easy to gull by its novelties."[3] It has exalted smartness and hypercriticism at the expense of scientific industry. It has constituted a mischievous concept "the economic theorist" or the specialist in economic theory—a superior breed of economist who looks upon positive inquiry much as the late Prof. Clifford regarded sociology, as "all about papa and mama, clothes, houses, shops, policemen, half pence, and such like."[4] It has countenanced a mode of scientific participation wherein the economic fledgling, instead of serving the hard apprenticeship of observation, investigation, description, and empirical generalization, attempts the short cut to scientific eminence by laying hold of the latest contribution to economic speculation, mulling and pawing over it by what Pearson has termed "some obscure process of internal cogitation," and emerging with "a paper on theory," with rejoinder and counter reply to follow.

2. Since 1885 there have been published in the United States nearly 30 textbooks on political economy. The text-writing habit of American economists is in part capable of materialistic interpretation—the problem of undergraduate teaching and the pressure of enterprising publishers. In so far as an economic treatise is an exposition—in manner suited to student or reader needs—of the prevailing state of the science, with such further addition of amendment as the independent labors of the author have contributed, it serves a valid scientific end.

This ceases to be the case when the textbook becomes either a mere stylistic paraphrase or a device for incorporating untested hypotheses into the body of

[1] Whewell, History of the Inductive Sciences (London, 1837), I, 264.
[2] Ibid., p. 322.
[3] Dernières Pensées (Paris, 1913), p. 241.
[4] Lectures and Essays (London, 1886), p. 435.

economic theory. The state of mind wherein the economist as teacher finds it essential, as evidence of intellectual autonomy, to prepare a textbook of his own composition, much as the economic departments of the last decade deemed it important to establish institutional journals, is, of course, unfortunate. But at worst this is prodigal waste of a scholar's energy. Far more serious in its scientific consequence is it for the textbook to be exploited in the exposition of scientifically incomplete theories. With the manual become in so far treatise, demanding that every new element undergo the hard, rigorous test of scientific method, that gaps be neither evaded nor glossed but remain gaps until properly bridged, substitution of hypotheses for theories, of assumption for proof, is a mischievous, because a masked, lapse.

3. It is no new thing for economists to engage in controversy as to final terms and in speculation as to ultimate concepts. The historic Political Economy Club discussed "the proper signification of the word 'demand.'" John Stuart Mill rated as "an unsettled question of political economy" the correct meaning to be attached to "the words 'productive' and 'unproductive.'" Malthus wrote a book on "Definitions in Political Economy" and appended a set of them. The last months of Ricardo's life were absorbed in animated controversy as to the measure of value; and there is at least Maria Edgworth's story of the gentleman who, when asked if he would be of the Political Economy Club, answered that he would "whenever he could find two members of it that agree on any one point."

There are two motives which may lead the economist to such activity. The first is the desire of the investigator to amend or revise an accepted term or concept by incorporating the tested result of his own research. It is the manner in which the progress of a science is registered. Its characteristics are caution, restraint, and abundant evidence. Of this kind were Ricardo's correction of Gresham's law and Walker's disassociation of the captain of industry.

Very different is the impulse to debate terms and to discuss postulates in a spirit of logical disputation and metaphysical refinement, as exemplified in so much American economic writing. If there be reluctance in accepting as "an axiom in modern thought" that "the hope of discovering the laws of nature and our relation to them by metaphysical reasoning is impossible,"[1] there is surely agreement that this is not the initial task of the investigator. The physicist debates the constitution of energy, the chemist discusses the composition of matter, the biologist argues the origin of life; but none of these as the economist theorizes over, let us say, the nature of value. Historical equipment, intellectual maturity, inductive experience must be possessed by the natural scientist in the very highest degree before he attempts to grapple with the ultimate concepts of his field of study. "What is matter; what is gravitation," asked Rowland; "what is ether and the radiation through it; what are electricity and magnetism; how are these connected together, and what is their relation to heat? These are the greater problems of the universe. But many infinitely smaller problems we must attack and solve before we can even guess at the solution of the greater ones."[2] Even then the physicist does so in face of a growing protest. An acute critic of modern scientific tendencies, after lamenting that "many men of science have forgotten the distinctions between the creations of nature and the creations of their imagination," and insisting that "the question may well be asked whether physical science has not outgrown a method proper for the alchemist and the astrologer," has attempted to draw "a definite boundary line between the regions of physics and metaphysics" by saying that "the domain of physics is concerned with the discovery

[1] More, op. cit., p. 1.

[2] Op. cit., p. 17.

of phenomena and the formulation of natural laws based on postulates which are determined by experience and generally accepted as true; the causes of phenomena and the discussion of the postulates of science lie in the province of the metaphysician."[1]

The distinction is too instructive to be lost. The term "meta-politics" to describe "an investigation of the speculative basis of political doctrines" is as old as De Lolme and Coleridge. So, too, a "meta-chemistry," dealing with "the chemistry of the supersensible," and a "meta-physiology," concerned with the "principles outside of and higher than those of physiology and the material organism."[2] The Oxford Dictionary indeed countenances "the practice of prefixing 'meta-' to the name of a science to form a designation for a higher science (actual or hypothetical) of the same nature but dealing with ulterior and more fundamental problems." Let there be, in like manner, a "meta-economics" concerned with the economics of the supersensible. Since we must theorize, let us, with Sir Lucius, preserve "the genteelest attitude into the bargain."

This constitutes no denial of the ultimate possibility and the eminent desirability of a theoretical economics. Hans Driesch prefaced his Gifford Lectures on the Science and Philosophy of the Organism[3] with the frank admission that (p. 3) "One may be a first-rate organic chemist even when looking upon the atoms as small billiard balls, and one may make brilliant discoveries about the behavior of animals even when regarding them in the most anthropomorphic manner, granted that one is a good observer; but it can hardly be admitted that our chemist would do much to advance the theory of matter, or our biologist to solve the problem of the relations between body and mind."

The economist may proceed further and agree in paraphrase that (p. 4) "only by becoming a true philosophy of nature are social sciences of all sorts able to contribute to the highest questions which man's spirit of inquiry can suggest." But having gone so far, the economist must continue at equal pace with the biologist and insist that a "naïve" science becomes a philosophical speculation by transition, not by replacement; that (p. 5) "we perhaps shall be able to understand what its part may be in solving what can be solved," and that (p. 4) "the beginning of a long series of studies is not the right place to decide this important question."

If there be substantial truth in the foregoing, the moral to be drawn is neither methodological formulæ nor an "advice to young economists," but a larger scientific consciousness. The best remedy for a half science, Poincaré insists, is more science.[4] The political economist can not with impunity continue to neglect an essential process in scientific inquiry. So long as he does he must be prepared to face the biting query that the critic of the speculative tendency in physical science, to whom I have already referred, has propounded: "Is it any wonder that a gulf is growing not only between men of science and the rest of the world, but also between theorists and those who are still willing to submit their imagination to experience? Such a gulf is certain to continue so long as theorists are willing and even anxious to ignore common sense and the facts gained by patient and exact experimentation."[5]

Some realization of this danger has come. "My last book on economics was a failure," Prof. Patten cheerfully recorded in 1912, "and having realized this I resolved to write no more books on economic theory until I could see some

[1] More, op. cit., pp. 17, 30, 113–14.
[2] Oxford Dictionary, sub nom.
[3] Aberdeen University Studies, No. 33, Vol. 1 (Aberdeen, 1908).
[4] Dernières Pensées, p. 241.
[5] More, op. cit., p. 112.

attainable goal."[1] On the other hand, the labors of a growing body of American economists—Taussig upon international trade, Ripley upon railway transportation, Kemmerer and Fisher upon prices, Moore and Barnett upon wages, Mitchell and Persons upon crises, T. S. Adams and Plehn upon taxation, to single out but a few—point to acceptance, conscious or unconscious, of Pearson's dictum that although the discovery of law is the peculiar function of the creative imagination, yet this imagination has to be a disciplined one. "It has in the first place to appreciate the whole range of facts, which require to be resumed in a single statement; and then when the law is reached—often by what seems solely the inspired imagination of genius—it must be tested and criticised by its discoverer in every conceivable way till he is certain that the imagination has not played him false and that his law is in real agreement with the whole group of phenomena which it resumes."[2]

The output till now is not large; but it is only in this wise that knowledge grows. In science as in affairs, "the recognition of our ignorance is the surest way to get rid of it."[3] Prof. Clifford's modest dream of "the good time coming" in natural science was "when also benevolent old ladies may be expected to know one end of a guinea pig from the other."[4] A generation ago Cliffe Leslie ventured, more hopefully, that America would take an active part in bringing to light and in solving those "new economic problems" which the chief economists of both worlds have never yet raised, and of which they have not dreamt.[5] If the coming years are to bring us nearer to that still remote goal, it must be by unremitting regard to Huxley's classic warning: "Whenever science has halted or strayed from the right path, it has been, either because its votaries have been content with mere unverified or unverifiable speculation; or it has been, because the accumulation of details of observation has for a time excluded speculation."[6]

SOME PROBLEMS AND PRINCIPLES OF GOVERNMENT REGULATION OF RAILROADS.

By EMORY R. JOHNSON,

Professor of Transportation and Commerce, University of Pennsylvania.

Different policies as regards the ownership and operation of railroads characterize the relation of the Government to the railroads in the countries composing the Pan American Union. In the United States, Uruguay, Paraguay, Bolivia, and the Guianas the policy of complete corporate ownership prevails; in Mexico and Brazil nearly all the railroads are Government lines; in Peru the major share of the railroads belong to the State; in Chile railroad ownership is about equally divided between the Government and the corporations; while in the West Indian and Central American countries, and in Colombia, Venezuela, and Argentina, the Governments own only a small share of the total rail mileage. There are corporation-owned railroads in all countries of the Pan American Union, and consequently each country must concern itself with the Government regulation of railroad charges.

The concrete problems connected with railway regulation necessarily vary with different countries. The purpose of regulation and the necessity therefor

[1] The Reconstruction of Economic Theory, p. 1.
[2] The Grammar of Science, p. 31.
[3] Clifford, Lectures and Essays, p. 96.
[4] Ibid., p. 423.
[5] Essays in Political Economy, p. 154.
[6] "The Progress of Science, 1837–1887," in Methods and Results: Essays (New York, 1898), pp. 64–65.

may be fundamentally the same in all countries; but the laws to be enacted and the administrative agencies to be created to make regulation effective, not only in preventing harmful practices but also in securing more adequate and efficient railroad facilities, will be influenced by the physical, economic, and political conditions characteristic of the several countries. No argument is required to prove the need of adapting railroad regulation to the special conditions peculiar to each country, or of legislating in the United States, Brazil, and elsewhere with regard to the particular transportation problems of each country. The purpose of this paper is not to consider the provisions of the legislation that any particular country should enact for the regulation of railroads; the object is rather to state some problems common to railroad regulation and some general principles that should control legislative and executive action.

As I have stated elsewhere,[1] the essence of the problem of Government regulation of railroads owned and controlled by corporations consists of harmonizing, as far as possible, the interests of private corporations of a quasi public character, engaged for profit in the performance of a service of a public nature, with the interests of the individuals, the localities, and the general public served by carriers. The aim sought by the carriers is an increasing business at rates that will yield as large profits as can be obtained without interfering with the growth of traffic; the interests of the public served by the railroads require that the service shall be progressively efficient, that the charges shall be as stable as general business conditions warrant, and shall be neither unreasonably high nor unjustly discriminatory as between persons, places, or kinds of traffic.

Such a problem as this must necessarily be a permanent one, because it involves the determination and enforcement of equity. Equity being a matter of relationship varies with changes in the things compared. What is equitable to-day may not be so to-morrow. A rate that was reasonable five years ago may be unjust at the present time, and a service formerly adequate may have become quite unsatisfactory. Some problems of government can be disposed of by legislation; other problems have to be faced day by day, year in and year out. Railway regulation is a problem that comes within the latter category.

There is no longer need of including in a paper upon railroad regulation an argument upon the necessity of making the agents and facilities of rail transportation subject to governmental authority. The carriers and the public alike recognize railroad transportation to be a service of a public nature that must needs be so performed as to afford, in as great a degree as possible, justice and fairness of opportunity as between persons and as among places. From whatever angle the long-contested question of the Government control of railroads may be viewed by men of different environment and training, all fair-minded men agree as to the necessity of such governmental authority over rail carriers as may be required to minimize unreasonable discriminations in services and charges. Differences of opinion arise, if at all, not as to the necessity for governmental regulation of railroads, but as to the limits that should be placed upon public control of the carriers.

To succeed in any reform it is necessary not only to proceed by right methods in the right direction, but also to know what limits to give to the movement. It is possibly more harmful to proceed too far than to stop short of the proper

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[1] See American Railway Transportation, ch. xxix, and Elements of Transportation, ch. xviii.

goal. These generalizations apply to the Government regulation of railroads, as indeed to all legislation intended to better economic and social conditions.

In considering the limitations that should be placed upon railroad regulation the fact should be kept in mind that, while the occasion that prompts legislation is the elimination and prevention of abuses, the main object of regulation is the attainment of positive, not negative, results. As a result of the Government's relation to the carriers the public should be served with better transportation facilities. Regulation should not only prevent the carriers from doing wrong; it should also formulate standards of right conduct, and secure for the public adequate transportation facilities so managed and operated as to render efficient service.

The primary need of the public is for adequate transportation facilities, for a transportation system that develops with the growth of the country, and so completely serves all parts of the country as to permit each section of the national territory to use its natural resources and to employ the skill and energies of its population in profitable production.

The healthy development of railroad transportation facilities, when they are provided by corporations, is conditioned upon the railroad business being an attractive investment for the owners of private capital, and upon the railroad service being one that appeals to men of executive ability. A policy of Government inspection, regulation, and control that made it difficult for railroad companies to secure capital under favorable conditions, or that caused men ambitious of large success in life to turn to other pursuits than the managing of railroads could not fail, in the long run, to be contrary to the best interests of the public.

In the management of railroads operated by a large number of corporations cooperation, both among connecting and among parallel and rival lines, is necessary. Shippers, consignees, and travelers desire a unified and responsible service by a transportation system that unites all parts of the country and is available to all patrons under like conditions as regards charges and service efficiency. The theory of the common law of the several States in the United States and of the statute law of the States and of the Federal Government has been that each railroad company should act independently of its competitors, and that companies owning parallel and rival lines should not be allowed to cooperate or unite in arranging their competitive services or in determining and maintaining their charges for those services. This theory of law is neither in accord with the necessary practice of the railways nor in harmony with the best interests of the public.

While the theory of common and statutory law remains unchanged, both the general public and the responsible Government officials recognize the necessity of the cooperation of rival railways in the making of rates, the arrangement of services, and the adjustment of numerous affairs of common interest to the several railways. This cooperation among competing lines is, under the present system of law, necessarily informal, but is possibly as effective as it would be if the law permitted a greater degree of common action. In the future development of railway legislation in the United States the necessity and desirability of railway cooperation should be recognized, and the railroads should be permitted to do openly, subject to Government supervision and necessary regulation, what they now do informally and in a large measure secretly.

It is now nearly a half century since railway regulation was begun by the several States of the United States, and nearly a third of a century since the Interstate Commerce act became a law. The experience of these years has made clear to everybody that railway regulation, if successful, must start with

giving full publicity to the service and to the activities of the companies that perform the service. This, however, is merely preparatory to regulation, which consists in substituting for private standards of business management equitable public standards as regards charges, services, facilities, accounts, and finances.

Railway legislation was undertaken in this country, primarily, to regulate charges and prevent discriminations. It has now so developed as to include a large degree of supervision and regulation of the facilities by which the services are performed and of the accounts and practices of railway companies. The financial methods and practices of railways have not yet been subjected to regulation by the United States Government. Several of the States, however, have undertaken the supervision of railway financiering, particularly as regards the control of the issues of stocks and bonds.

While railroad regulation in the United States, which at first concerned itself mainly with the prevention of unreasonable charges and unjust discriminations, has broadened into the administrative supervision of the facilities, and services of carriers, the principles of rate making and regulation are still in process of evolution. During recent years the conviction has been growing that the cost of the service should be given more weight than it has been accorded in the making of rates and in passing judgment upon rates whose reasonableness may be called in question before commissions or courts.

Because of the greater consideration being given to cost in judging as to the reasonableness of rates and also because of the growing conviction on the part of the public that the financial transactions of railroads should be as free from secrecy and as fully subject to Government regulation as are the services, charges, and accounts of the carriers, the Congress of the United States in 1913 directed the Interstate Commerce Commission to perform the difficult and lengthy task of valuing the property of all the railroads in the United States. Prior to this action by Congress, several of the States had prepared, or had undertaken, the physical valuation of the railroads within their respective borders. The people of the United States are fully committed to the task of determining the value of railroads and of keeping the valuation up to date by such periodic revisions as may be necessary.

It remains to be seen to what extent the decisions of the Interstate Commerce Commission and of the several State commissions in the United States as to the reasonableness of rates that have been fixed by the carriers shall be determined by giving weight to the cost of the service. During the last decade, rapid progress has been made in railroad accounting, and it is, perhaps, possible that Government accountants may be able to determine, with fair accuracy, the cost of transportation for the several classes of freight and for the commodities that move in relatively large volume; although it is not to be expected that it will ever be possible to ascertain closely the cost of transporting each particular article of freight carried by the railroads. On the whole, however, it is probable that cost can be made a workable general basis of railroad charges.

Should this be found by experience to be the case, the question will still remain how fully costs ought to be made the basis of railroad charges and to what extent, if any, consideration should be given to the value of the service to shippers and consignees. Economists, commissioners, and legislators are still debating this question, and I shall not venture to assert what the ultimate decision will be as to the theoretically just and the most desirable basis of railway charges. As I now view the question, it does not seem to be probable that cost will ever be made the sole basis of railroad charges. It is probable that other factors will be, and ought to be, taken into consideration in determining the reasonableness of the charges of railroad companies.

One reason for believing that this will be the ultimate decision is that cost is a basis more in harmony with charges made in accordance with private business standards than with charges made with reference to the realization of general public and social aims. Unless it be shown, theoretically or by experience, that an adherence to cost as the primary standard of reasonableness of rates will enable the Government so to regulate railroads as to promote social ends to a desirable degree, it is not to be expected that cost will be the only factor in deciding what is just or unjust, desirable or undesirable, advantageous or disadvantageous as regards the charges of public carriers.

The one debated step in the regulation of railroads not yet taken in the United States is that of public control of the financial operations of railroads and other public utilities. Measures providing for the supervision and regulation of the stock and bond issues of railway companies engaged in interstate commerce have been before Congress for several years, and there are indications that Congress will, in the near future, require railroad companies to secure the Government's approval of proposed issues of securities. As I have already indicated, such legislation is as much to be desired as was the legislation subjecting the railroad services, charges, and accounts to effective governmental control.

In this brief discussion of some of the problems and principles of governmental regulation of railroads the experience and needs of the United States rather than of other countries have necessarily been considered. Doubtless, the general principles of railroad regulation applicable in one country are valid in other countries, although practical measures to give effect to these principles may vary widely on account of different political and economic conditions.

Emphasis needs to be laid in all countries upon the administrative character of the problems of governmental regulation of railroads. Success depends upon the adequacy and efficiency of administrative agencies created to enforce legislation. The wisest laws are those that establish general principles and standards and give to the commission or administrative body created to enforce the laws ample discretionary and executive powers. The people of the United States were somewhat slow to realize this fact, but the lesson has now been learned, and the Federal and State commissions are being given adequate administrative powers.

In considering the relation of the Government to the railroads, one is necessarily confronted with the broad question whether regulation is to be permanent in some countries and Government ownership to prevail in other countries, or whether Government ownership will ultimately prevail in all countries. Personally, I do not believe this fundamental question can be determined theoretically or a priori. Each country must work out the problem on the basis of experience and with reference to its own political and economic conditions.

One thing is certain, that no country will find it to be permanently advantageous to have both private and Government operation of railroads. The dual system of private railroads and Government lines has been shown by the experience of European and other countries to be as impracticable as illogical. Government regulation is theoretically defensible, and in some countries has been found to work successfully. Likewise, Government ownership and operation have proven satisfactory in a number of countries, but the lesson of experience is that the success of Government ownership depends upon the complete nationalization of railroads and the management of the nationalized system of railroad transportation with reference to the furtherance of clearly defined political and economic ends.

Predictions as to the future are usually of little value, but it seems apparent that private ownership and Government regulation of railroads is to prevail in some countries and that Government ownership and operation is to be the permanent policy of other countries. Some States of the Pan-American Union now have private ownership of railroads under Government regulation, other States have completely nationalized their railroads, while other countries are experimenting with the policy of partial nationalization. The prediction I venture to make is that ultimately all of the nations of the Pan-American Union will adopt one or the other of the two alternative policies, private railroads under Government regulation or complete nationalization of railroads.

Adjournment.

JOINT SESSION OF SECTION IX WITH AMERICAN ECONOMIC ASSOCIATION.[1]

RALEIGH HOTEL,
Thursday afternoon, December 30, 1915.

The meeting was called to order at 2.30 o'clock by the chairman.

TOPIC:

The Relation of Public Finance to Private Credit.

Paper presented by Section IX:

The relation of public finance to private credit, by Willard Straight.

Discussion:

Julio Philippi, Sridinas R. Wagel, C. E. Pepper, Vincent Gonzáles B, and Prof. Bonn.

The paper by Mr. Straight follows:

THE RELATION OF PUBLIC FINANCE TO PRIVATE CREDIT.

By WILLARD STRAIGHT,
American International Corporation, New York City.

The economist or the student of finance, in discussing the theory of credits, must necessarily analyze the interaction of gold reserves, of inflation and depreciation, and the effect of favorable or adverse balances of trade. Deferring to your superior knowledge of these most interesting and important matters, I shall not attempt to deal therewith. I shall, if I may, ask you to approach the general subject from a somewhat different angle, and to regard private credit as the national basis upon which any constructive international commercial and financial development must depend.

In the past we in the United States unfortunately have been accustomed too generally to consider credit problems not on their intrinsic merits, but from partisan points of view. Thanks to our enormous resources we have been able to borrow freely and on easy terms from Europe. Our own capital, therefore, inevitably has been attracted by quick returns and we have been influenced by reasons of immediate expediency rather than guided by a clear conception of the ultimate goal. In consequence, we were long blind to the necessity of evolving a well-balanced, consistent, and progressive national financial policy, designed to correlate and galvanize into effective cooperation the agricultural, industrial, and commercial activities from whose cumulative power such a policy should derive its momentum. Our failure to appreciate the importance of creating adequate credit machinery cost us dearly. We persistently disregarded the bitter experience of recurring panics and were long deaf to the recommendations of men who, like the late Senator Aldrich and Mr. Paul Warburg, urged the organization of a banking system which would enable us to mobilize our reserves and to utilize to the fullest extent our credit resources.

[1] There was no stenographic report of the session.

In the 20 years preceding our Civil War the United States had traded in every sea. Foreign commerce in those days was largely a question of barter. The intricate problems of international finance, which are now so absorbing, were unheard of, and the development of markets by judicious investment was virtually unknown. Great Britain, Germany, and France later discovered that bankers held the golden key to over-seas trade. We, however, were busily engaged in borrowing abroad and ourselves had no surplus funds for foreign investment. We exported raw materials and imported manufactured goods. Following the Spanish War, however, American industry, through the great combinations, became organized in units sufficiently powerful to enable it to enter the export trade. Our manufacturers soon realized that unless American bankers would finance their foreign customers they could not compete with British and German industry. An American banking group was organized for China, and loans to South and Central American Republics were considered. A certain stage of what might be termed economic saturation having been reached within our own boundaries, we began to look abroad. Just as the development of our eastern seaboard enabled the merchants of the early fifties to hold their own in the trading competition of the period so the general standard throughout our country just prior to the European war had brought our bankers and manufacturers to the point where increasing production and accumulating capital at home, and the ability to borrow on low terms in London and Paris, made them anxious to enter the financial-commercial struggle for trade with the as yet undeveloped corners of the earth. The Federal reserve act, by releasing reserves, added tremendously to our credit resources. Before the efficacy of this new machinery could be tested, however, it was subjected to the sudden strain of war.

The American Republics have been differently affected by the world-wide crisis. We who have been able to sell largely to Europe have been enriched. The countries which have depended upon European capital for their development have been obliged to postpone many important works. But all of us shall be wise, indeed, if by closely observing the manner in which the nations now at war deal with the problems to which this crisis has given rise, we are able to profit by their example and to avoid the consequences of their mistakes.

At the outset Germany alone was prepared. Not only her armies, but her financial and industrial resources were at once mobilized. In France and in Great Britain the magnitude of the task and the necessity for correlating every form of national activity in the supreme struggle for victory was not at once realized.

Coincident with military and naval endeavor, the importance of conserving national credit was recognized from the outset. The German problem of war finance has been simplified by her inability to import goods from abroad. The question of at present providing gold exchange has consequently been one of subordinate importance. Great Britain and France, on the other hand, have been obliged to purchase vast quantities of material, and their financial measures will repay the most careful study. Early steps were taken by these two Governments to assure the continuance of business as nearly as possible along normal lines. In England bill brokers and foreign exchange houses, as well as manufacturers and merchants engaged in over-seas trade, were given special guaranties by the Government. Proceeds of the war loans were utilized in a manner calculated to assure uninterrupted and profitable business, in order that the proceeds thereof might be subject to yet further calls. When the London Stock Exchange was opened early in the present year it was announced that no new foreign issues might be made without the permission of the Chancellor of the Exchequer. The financial resources of Great Britain

were to be conserved for the prosecution of the war. Pressure was brought to bear upon British investors to induce them to sell their holdings of American securities in order that they might invest in the British war loans, and only recently, in order to maintain exchange, the Government itself has offered to buy in British holdings of American securities by exchanging its own bonds therefor.

In France, through the cooperation of some of the large private banking houses, French investors were induced to deposit their holdings of American issues to provide the basis for a credit which was negotiated in this country. In both England and France, every effort was made to issue war loans in a form which would attract the small investor. In other words, the European financial policies have been calculated to provide the means for continuing the war not only by financing military operations, but by granting extraordinary facilities to conserve financial, industrial, and commercial resources to the fullest extent possible. Such synchronization of effort; such coordination of national activities—cooperation on such a scale—is without precedent. For us in the United States at least, it would, in the absence of special legislation, be impossible. Yet we, too, have widened our financial outlook and engaged in operations which two years ago we would have considered fantastic. In the autumn of 1914 our most pressing problem, the stabilization of exchange by the settlement of our immediate debt to Europe, required the united energy of the newly organized Federal Reserve Board and the bankers who loyally stepped into the breach. Within six months after the commencement of hostilities, however, we were busily engaged in this country in devising ways and means by which we might assist Europe to pay for our goods which were being purchased in increasing volume. We bought back from Europe great quantities of our securities. A series of minor credit operations culminated in the flotation of the great allied loan. The success of the war loans in Great Britain, France, and Germany depended upon the credit of the countless private individuals who subscribed their savings to support the mobilized and correlated military, financial, industrial, and commercial activities. In making a public offering of the Anglo-French loan in this country, the American bankers were performing a function analogous to that of the Governments in Europe. By mobilizing our private capital, they were endeavoring to create a public credit to finance the great export trade from which our present prosperity has been derived. This transaction was almost as important to this country as a whole as it was to the powers now at war. Every individual who has invested in the European credits which have been negotiated here, has stimulated American industry by facilitating the export of American goods and by acquiring a private investment has performed a public service.

Prior to the outbreak of the war in Europe there had been intimate commercial relations between the American nations. The trade between this country and our sister Republics farther to the south, however, had not been developed. There was a long-established British and French investment in the Argentine, in Brazil, in Uruguay, in Chile and Peru, and the dealings between South and North America were largely conducted through London and Paris. The relationship was triangular; imports into the United States from South America were heavily in excess of our exports, and our debit balance was settled in pounds sterling. The declaration of moratoria, the dislocation of credit machinery, the interruption of shipping affected the entire American continent. Canada only was at war. The neutral nations, finding the old channels of trade suddenly blocked, looked to each other. We set to work to examine our mutual needs and endeavored to find means by

which we might be of mutual assistance. Steps were taken to handle exchange direct between New York and the other American financial centers. Branches of the National City Bank were opened to provide facilities which had not theretofore existed. Informal discussions between diplomats and representatives of American business developed into the Pan American Financial Conference held last spring under the auspices of our Secretary of the Treasury. Pan Americanism, which too long had been a pleasant after-dinner phrase, gradually assumed practical significance as it was realized more generally throughout both continents that an increasing intimacy would be mutually beneficial.

It is difficult to generalize. Each nation has problems peculiarly its own, which must be given separate consideration and regarded in the light of particular needs. It is, nevertheless, possible to state that in almost every case the Republics to the south require capital for their development, while the United States is seeking more extensive markets for its manufactured goods.

By reason of our present great and increasing prosperity and the restrictions which the necessity for reconstruction will impose upon the European bankers who have hitherto financed development enterprises throughout the world it would seem inevitable that those who are seeking capital must, for a time at least, largely depend upon the accommodation which they may be able to secure in this country. Fortunately, with the increase of our investing power there has come a rapidly growing appreciation of the fact that this power, constituting as it does a national asset, should be utilized for national ends. The resources which we will have at our command will undoubtedly in some measure be available for the rehabilitation of European industry after the war. It will be to our selfish interest to assist in so far as we consistently can in the restoration of normal financial and commercial conditions throughout the world. In order that American industry, upon which our prosperity so largely depends, may benefit by the use of our lending power, however, it must be a primary feature of our policy, as far as possible, to utilize our available capital in cooperation with the borrowers to create and assure a market for American goods. But the readiness of American bankers to undertake to offer foreign securities will necessarily depend upon the credit of the prospective borrower and upon the return to be derived from the purchase of the securities offered. The credit of certain of our sister Republics in South and Central America is unquestioned, but the development of others, equally rich in resources, has in the past been hampered by political disturbance. They have afforded fields for speculation rather than for investment, and foreign capital has too frequently allied itself with one political party or another for illicit mutual gain rather than to secure a legitimate profit for public work well done. It has often been urged that our own Government should in some way guarantee or assure the safety of foreign investments undertaken by its nationals. Our State Department may use its good offices to secure the enforcement of a just contract entered into in good faith, but it can not, and should not, act as a collecting agency. It is in the interest of those who desire to borrow, nations as well as individuals, to maintain their credit in order that they may secure necessary financial assistance on reasonable terms. To assure public is to safeguard private credit. Where private credit is unquestioned national borrowing power is secure.

The European war has given to the American Republics a new bond of mutual dependence. Politically we are closer than ever before. In our mutual necessity there is a need and, at the same time, an opportunity for much more intimate commercial and financial cooperation. You require capital, while we, in

turn, must try to stimulate the exchange of products between this country and our sister Republics to the south. In order that we may sell our goods to you, we must enable you to produce more, which we, in turn, can purchase. We are beginning to realize that we must furnish capital to our customers if we would market our goods. We must maintain a relationship which, in being mutually profitable, will bring a better mutual understanding of our aspirations and ideals. Such a relationship can be established if those who would secure financial assistance offer conditions which will attract our investment and if we, in turn, are willing to grant the credits which will enable you to purchase in this country the articles which you require. Both lender and borrower must mobilize private credit—the borrower in order that he may borrow advantageously for the development of his resources; the lender in order that he may lend intelligently for the extension of his national trade. Private credit is the ultimate basis of international finance, and we are just entering upon an era where public finance will play an increasingly important part as the most powerful instrument of constructive domestic as well as foreign national policy.

Adjournment.

THIRD GENERAL SESSION OF SECTION IX.

New Willard Hotel,
Friday morning, December 31, 1915.

Honorary Chairman, Roberto Ancízar.[1]
Chairman, Edwin R. A. Seligman.

The session was called to order at 10.30 o'clock by Chairman Seligman.

Mr. Edwin R. A. Seligman. Gentlemen, we have the great pleasure and honor of having with us to preside over the sessions to-day Señor Dr. Roberto Ancízar, the first secretary of the legation of Colombia, whom I have great pleasure in introducing.

The Chairman. We will now have the pleasure of listening to Dr. Seligman read his paper on "The relations of Federal, State, and local revenues."

THE RELATIONS OF FEDERAL, STATE, AND LOCAL REVENUES.

By EDWIN R. A. SELIGMAN,
Professor of Political Economy and Finance, Columbia University.

It is only in modern times that the fiscal interrelations between central and local governments have become of importance. In ordinary States the question is one of divergence between national revenues and local revenues. In Federal States the problem is further complicated by the interposition of the Commonwealth or State between the Federal or National Government on the one hand and the local government on the other.

Government revenues are the counterpart of Government expenditures, and these depend primarily upon the character and the extent of Government functions. From this point of view, the fiscal relations in question are of considerable complexity. All expenditures were originally local in character. Economic life was at the outset based upon a local economy, and what little money was spent was both raised and expended primarily for local purposes. It was only when the National State developed as a result of the profound economic changes of the later Middle Ages that national expenditures now appeared on the scene, and especially for the purposes of the army and the navy. Somewhat later there came a twofold development as a consequence on the one hand of trade and commerce and on the other of democracy.

Trade and commerce were responsible for the growth of expenditures connected with transportation, and especially with good roads. Although this was accomplished in part by the localities, more and more supervision was exercised by the Central Governments, so that the expenditures of the Central Government for such purposes now grew to considerable proportions. The same was

[1] At present minister from Colombia to Argentina.

true still later when, as in France, the construction of canals called for large outlays. The result of the movement down to the beginning of the nineteenth century was that the great burden of expenditure resting upon the individual was primarily for the purposes of the Central Government, and that even in England the local expenditures were limited in large measure to the care of the poor, with very slight additions for roads and other miscellaneous purposes.

At the beginning of the nineteenth century the democratic movement, which was the result of the industrial revolution, altered the situation in two ways. In the first place there now came a rapid increase of expenditures for education, for improving the health and sanitation of the community, and, finally, for developing the general welfare in its still wider aspects. In the second place these expenditures were overwhelmingly local in character, although there has also been a tendency of late for the Central Governments to assume to an increasing extent some of the same functions. The consequence has been that, on the whole, in the most recent period local expenditures have become in many ways quite as important as, even if not more important than, the central expenditures.

While there has been this general movement, the situation has been complicated by the fact that Government functions and expenditures have been variously apportioned in different States. In some States certain functions have been gradually relegated to the local communities; in others the contrary is the case.

In the Anglo-Saxon communities there has been a growing tendency for a central control over the local functions of government; in others, as in France and Italy, there has been a tendency toward a greater decentralization. Moreover, in all Federal States a further complication has been introduced in that in the separate Commonwealths or States that stand between the localities and the Federal Government there has been a mixed movement both toward centralization and toward decentralization; so that in some communities the one tendency preponderates, in other communities the contrary. In the United States, for instance, the States have been gradually assuming the control of several functions that were originally left to the localities, as in the case of highroads, hospitals, asylums, State constabulary, and the like. On the other hand the States have been losing some of their functions to the Central Government, as in the case of the growing Federal control over railroads and various forms of business enterprises; and we now hear insistent demands for a Federal quarantine and for Federal control of labor conditions. As a consequence, there is at present no clear-cut line between Federal, State, and local functions and expenditures.

Since the revenues of Government stand in a certain relation to expenditures, the same difficulties that have arisen in the case of expenditures reappear in that of revenues. In fact, there are even more complications in revenue than in expenditure because of the possibility, as we shall see, of expenditures by one form of government being defrayed out of the revenues derived in part or in whole from another form of government. The whole subject of public revenues is therefore bound up with the problem of a proper relation between central and local finance, or in the case of Federal Governments between Federal, State, and local finance.

II. As a preliminary to a discussion of the fiscal relations of central and local governments, it is necessary to recall the two controlling principles of public revenues. These, as is well known, are, on the one hand, the principle of ability to pay and, on the other hand, that of benefit conferred. It need not be pointed out that the latter was the one long accepted by publicists, and it is only in recent times, with the emergence of modern democracy and with the

insistence on the specifically social aspects of public finance, that the principle of ability to pay has come to the front. The most recent analysis of the subject, however, discloses the legitimacy of both principles, although it is careful to relegate each principle to its proper sphere. It is now well understood, for instance, that taxes in general must be framed and apportioned according to the principle of ability to pay; while most of the remaining categories of public revenues, such as fees, special assessments, and prices of all kinds for governmental services conform to the principle of benefits conferred or cost incurred.

While this demarcation is now generally accepted, it is none the less true that there is a certain border line or zone of indifference. Certain taxes like some imposts on land can be upheld almost as well on the principle of benefits as on that of ability to pay; while other payments, like inheritance taxes, which in some countries (like the United States) are legally included under the head of payments made for benefits or privileges, correspond in reality to the principle of ability. Without attempting to pursue further this inviting line of inquiry, it is sufficient for our purpose to point out that there is a jurisdictional division corresponding roughly to the above division in principle; that is to say, the chief home of revenues predicated on the principle of benefit is to be found to-day in the local divisions, while the chief home of revenues based on the principle of ability to pay is to be found in the more central governmental jurisdictions. The line is, indeed, not entirely sharp; for we find, on the one hand, some fees levied and not a few industries or enterprises conducted by Central Governments; while, on the other hand, certain local taxes are to be explained primarily on the principle of ability to pay. But as a general principle it is true that there exists in most countries to-day a larger field for the principle of benefits in the localities, and a larger field for that of ability to pay in the central jurisdiction.

III. If we turn to an analysis of the actual conditions to be found in the fiscal relations of central and local governments and if we confine our attention to what is the most important part of the subject, viz, the revenue from taxes and primarily from taxes which may be upheld on the principle of ability to pay, we shall see that there are no less than five different methods actually employed. These are as follows:

(A) The taxes are assessed by local authorities, with additions for the use of the Central Government. This is the common method in the American Commonwealths, where the local revenues are derived, to an overwhelming extent, from the general property tax, levied upon real and personal property alike. The rate of the tax for purely local purposes is ordinarily arrived at by dividing the assessed valuation of the property in the locality by the amount to be raised for local purposes. To this local rate there are added rates for county as well as for State purposes, each of which is ascertained by dividing the assessed valuation of the property in the locality by the amount needed for the expenses of the county and of the State respectively. The same tax, assessed by the local officials—viz, the general property tax—is thus utilized for both local and central purposes.

(B) The tax is assessed by the central authorities with additions for local purposes. This is the reverse of the system last mentioned. It is to be found in France, whose example has been copied in not a few States. In France there were until 1916 only four taxes levied for State purposes—the land and buildings tax; the *patentes* or business tax, the *personelle et mobilière* or personal tax, and finally the door and window tax. The local revenues were obtained by adding a certain percentage, known as the *centimes additionels*, to

source assigned to the other jurisdictions may be inadequate. There seems to be no convincing reason why the surplus of the one kind of revenue should not be utilized to make good the deficit of the other. Finally, it may occur that while a particular source of revenue is normally desirable for the local as against the State government, or for the State as against the Federal Government it will none the less be found that there are certain aspects of that particular revenue which make a part of it, at least, preferable for the broader jurisdiction.

In short, while there is much to be said for the principle of separation of source, we conclude that it is in need of being supplemented by other principles in order to secure a well-rounded fiscal system.

We come, then, finally to the consideration of the second and the fourth systems, mentioned above as B and D.

The system of a centrally assessed tax with additions for local purposes has much in its favor, especially when the tax chosen is one with a broad base. A good example of such a system is the Prussian income tax, which is administered by the State, and where additions up to a certain percentage are permitted for the use of the localities. The advantage is that the individual in paying his tax bill gives a lump sum for both State and local purposes, and is relieved from the annoyance of separate returns. The same is true of the *centimes additionels* in France. The obvious danger, however, in such a system is that by using the same tax for both State and local purposes we run the risk of increasing the rate to such an extent as to interfere with its maximum productivity—a danger inherent in any system which looks toward the singleness rather than to the multiciplicity of taxation. With this warning, however, and on the understanding that the system must not be pushed to an extreme, much may be said for the above method of local additions to centrally-assessed taxes, as supplementary to the other methods in vogue.

Finally, we come to the principle of division of yield. This is the obvious result of any particular source of revenue where the stream of income gushes forth so abundantly as to produce more than is needed for the purpose in hand, and where, conversely, there is a deficiency elsewhere. An example of this is afforded by the railway taxes in some American Commonwealths. It is conceded that from every point of view it is preferable to have the assessment of railways in the hands of central authorities; for the experience of the American States with the local assessment of what is essentially inter-local or extra-local in character has been unfortunate. To take, however, the entire revenue of railways for State purposes would be in not a few cases to rob the localities of a share of what they have been accustomed to rely upon; and it was, therefore, an easy transition to introduce the system of a State assessment and collection, with a repartition of at least a part of the yield among the localities. The same point of view is observable in the German inheritance tax, where for administrative and fiscal reasons it was found desirable to levy the tax as a Federal impost, but where the separate States which had been accustomed to depend upon that source of revenue were able to prefer a claim to a portion of the yield.

In short, wherever it can be shown that a particular tax might well, on the basis of general economic considerations, aliment both the central and the local treasuries, there is strong reason for maintaining the principle of division of yield.

Our general conclusion from the above analysis is that, while the first and fifth methods are relatively indefensible, a combination of the second, third, and fourth methods affords a reasonable ground for expectation of success.

IV. In deciding upon choice between or a combination of the above methods it is well to keep in mind certain fundamental principles. The three principles that should guide in the allocation of revenues as among various tax jurisdictions are: The extent of the base of the system, the efficiency of the administration, the adequacy of the revenue.

The extent of the base of taxation is obviously important. Some taxes rest, by their nature, upon the broadest possible base. The productivity of an inheritance tax, for example, depends upon the number and size of the assets of decedents. It is clear, however, that the smaller the area the more variable will be the revenue. In a single town the death of one wealthy individual may swell the revenue from the inheritance tax in any one year to a point which may not be reached again for many years to come. This would be fatal to fiscal stability. A similar consideration would apply, although in a somewhat diminishing extent, as between State and nation in a Federal Government. The larger the area the more regular the revenue.

Take, again, business or corporate activity, which originally was local in character, but which has now become State and even national in character. Where the base is so broad any attempt to narrow the jurisdiction is fraught with peril. In the Middle Ages, for instance, a local or municipal tax on personal property was entirely feasible, because of the essentially local character of property. In modern times, however, the assets of a large business and the intangible character of much of the property have now become national or international in scope, so much so in fact as to render fruitless any attempt to reach that property by local methods; and the same consideration has led to the abandonment in recent years of any effort to levy a purely local income tax.

Secondly, the efficiency of the administration. Certain taxes like real-estate taxes are specially adapted to initial local administration, because the assessment takes place under the eyes of the individual taxpayer. In many other cases, however, the farther away we get from local administration the better the chances not only of securing expert officials, removed from the dependence upon local prejudice, but also of making allowance for certain inevitable gaps in any local administration. When the administration, for instance, of the liquor license or excise tax in New York was transferred from local officials to the State administration the revenue was largely increased. Again, if we have a system of State assessment of corporations, the difficulty arises not only as to the allocation of the due proportion of total revenues earned by the corporation, but also of knowing what to do with purely interstate revenues. In the case of the inheritance tax, where a part of the revenue has been based upon the principle of residence of the decedent, we can not ignore the chance of evasion by transferring the legal residence to a State where the tax does not exist, or where the rates are lower. Finally, the history of the United States particularly has shown that a Federal administration is often more efficient than the State administration. Compare, for instance, the results displayed in the construction of the Panama Canal with those shown in the construction and maintenance of the new highways in New York. The efficiency of central as over and against local administration depends not only upon general political and administrative conditions, but also upon the constitutional and economic relations of certain revenues themselves.

Thirdly, the adequacy of the revenue in question must not be overlooked. In a certain jurisdiction which is already fairly well supplied with revenues, and where for reasons of greater equality or expediency a new source of revenue is added, it not infrequently happens that the total is more than is

needed, while, on the contrary, as again not seldom occurs, where this new source had previously been enjoyed by another jurisdiction, the situation may be the reverse. Take, for instance, the case of a tax on corporations, which up to that time had largely alimented the local budget and which now is transferred to the State, thus resulting in a possible deficit in the one case and a surplus in the other. Take, again, the much mooted project of a Federal inheritance tax in the United States, where even if the income were needed, the gap in the revenues would be strongly felt by the separate States. Such examples, which might easily be multiplied, indicate the need of a careful consideration of the principle of relative adequacy of the revenues.

The practical inferences from the above would, of course, differ in every nation. I shall limit myself, in closing, to a summary of the conclusions applicable at the present time to the United States.

The Federal Government should rely largely upon customs duties and indirect taxes, to be supplemented by a Federal income tax and a Federal inheritance tax. Up to the last quarter of the nineteenth century, the Federal Government depended, except in a few emergencies, upon customs duties. During the Civil War a system of internal revenue was added, because it made possible changes in the customs duties which without them would have been far more difficult to bring about. A single source of taxation is always less elastic than a multiple source.

While from a purely fiscal point of view the customs duties and the indirect taxes would entirely suffice for the support of the Federal Government, there has been, during the past few years, in the United States as elsewhere, an irresistible demand to supplement this system of indirect taxes by direct taxes which would respond more clearly to the principle of individual ability to pay. This movement has resulted in the imposition of a Federal income tax, and will probably lead to the enactment of a Federal inheritance tax. It is, on the whole, defensible not only from the point of view of equality of taxation, but also because both the income and the inheritance tax rest on so broad a base as to make their utilization by the Federal Government desirable. For a Federal assessment will remove the difficulties of interstate taxation and minimize the dangers of jurisdictional evasion.

On the other hand, the scope of the Federal direct taxes should not be exaggerated. While the modern tendency is everywhere in the direction of lessening indirect taxes, it must be remembered that the change is largely due to the fact that they have hitherto played an overwhelmingly preponderant rôle in taxation. It is a sound fiscal maxim not to rely exclusively or even to a preponderant extent upon either direct or indirect taxes, for each system has certain advantages of its own. In view of the fact that State and local taxes in the United States are to so very large an extent direct in character, it would seem to be the statesmanlike policy to retain a substantial measure of indirect taxes for the support of the Federal Government. The income tax and the inheritance tax which may be levied by the Federal Government ought, therefore, to be regarded as supplemental, rather than primary sources of income; especially as both the income and the inheritance taxes will be needed in the future to a still greater extent for purposes of State and local revenue. Our conclusion, therefore, is that the rate of the Federal income tax ought to be relatively low; and that if a high inheritance tax should be imposed, only a portion of the yield ought to be retained for Federal purposes.

The States, on the other hand, should rely chiefly upon corporation taxes, upon special taxes on property, and upon liquor and other license taxes. Where these do not suffice and an increasingly successful endeavor is made to

abolish the inadequate general property tax, the States should rely, in addition, upon a part of the inheritance tax, to be assessed by the Federal Government, and finally upon income taxes, which should be supplementary, and as far as possible comformable, to the Federal income tax.

The reason why a distinction is made in the suggested assessment of these two taxes is that the problem of residence is more easily solved in an income tax than it is in an inheritance tax; for the inheritance tax is really a tax upon the estate of a decedent, while the income tax may be so arranged as to include a business tax as well as a tax upon the individual. In either case, however, and irrespective of the jurisdiction which assesses the particular tax, some American States will no doubt to an increasing extent rely upon both the income and the inheritance tax.

Finally, local governments should rely primarily upon revenues referable to the principle of benefits, such as special assessments and fees of all kinds, which should be better regulated by State law; upon the tax on real estate and especially upon land taxes; and, so far as further revenues are needed, as a substitute for the unworkable personal property tax, upon additions to the State income tax.

It is not unlikely that the problem of fiscal interrelations will be solved in this general direction in the United States; for the solution is in harmony with the fundamental principles that have been presented above. In other countries, the practical aspect of the solution will no doubt be different; but it is safe to say that throughout the world the trend of adjustment in the fiscal relations of Federal, State, and local governments will be found to be in line with the solution that has been sketched above.

Hereupon Dr. Toribio Esquivel Obregón, of Mexico, addressed the section in Spanish. Subsequent to the session his remarks were put in writing and are now included as a part of the published Proceedings:

Con el propósito de colaborar con el señor Philippi, que ha expuesto detalladamente el sistema fiscal de Chile como una contribución a la obra de este congreso, tendente a una mutua inteligencia de las naciones americanas, y con el propósito también del señor Profesor Seligman, que ha hecho un resumen de las prácticas fiscales de los principales países del mundo, y todavía más, ha reducido esas prácticas a cinco diferentes sistemas, presentando los argumentos que en pro y en contra de esos sistemas pueden ofrecerse, voy a mi vez a dar una idea del sistema fiscal de México, que puede servir como ilustración en este caso, toda vez que la República de Chile está gobernada por un régimen central y México adoptó desde un principio, aunque haya tenido varias alternativas, el sistema federal para su gobierno.

No puede tratarse ningún problema social de la América Española sin remontarnos como punto de partida al estudio de los sistemas introducidos por España en la época colonial. Urge rectificar falsos conceptos que en contra de la administración española en América ha habido gran interés en esparcir y que la historia imparcial no justifica. Hoy estamos congregados con el fin de buscar la manera de estrechar los vínculos que deben ligar a los pueblos de este continente; y naturalmente buscamos esa intimidad en la unificación de leyes y procedimientos tanto en el orden científico como en el orden político y administrativo, y es digno de hacerse constar que esa unidad que nosotros buscamos la tenía realizada España bajo un sistema que con el transcurso del tiempo se ha apreciado mejor y que los sabois de este país han reconocido como el más inteligente a la vez que más filantrópico y benéfico que puede imaginarse.

Yendo directamente al sistema fiscal existente en México durante la dominación española, es indudable que estudiado a la luz de los principios económicos modernos no podrían recomendarse muchos de sus detalles, por ejemplo, el sistema de monopolios; pero es indudable también que en aquella época la ciencia de las finanzas no había hecho los progresos que en la actualidad, y si España implantaba un mal sistema, era inconscientemente de que aquéllo era malo, puesto que la misma nación española tendría al fin que resentirlo.

Pero indudablemente que aquel sistema implantado en México, con todos sus defectos desde el punto de vista de la ciencia pura, tenía ventajas desde el punto de vista meramente fiscal, que los modernos financieros de la nación no han podido compensar o encontrarle equivalentes, a pesar de que en los tiempos modernos no cabe la disculpa de la ignorancia de la ciencia.

En efecto, Nueva España producía para el fisco anualmente le cantidad que necesitaba para satisfacer cómodamente los gastos de su administración, para el fomento de las mejoras materiales y morales que se emprendían, para suplir los déficits en los presupuestos de Filipinas, de la Capitanía General de Yucatán, de Louisiana y la Florida y todavía después mandaba al monarca español una suma que por término medio era de seis millones de pesos anuales.

Desde la consumación de la independencia hasta la actualidad no ha llegado a existir un estado semejante de florecimiento en la hacienda mexicana, pues debe advertirse que la colonia jamás contrajo deudas en el extranjero y que todos aquellos recursos fueron el producto de sus ingresos normales, en tanto que desde la época de la independencia hasta la actualidad, solamente en tiempos del gobierno del General Porfirio Díaz el presupuesto de egresos se saldaba con los ingresos, y aún aparecía un excedente; pero en esa misma época del General Díaz los empréstitos que se contrajeron superaban a los excedentes y puede, por lo tanto, decirse que ni entonces se logró propiamente nivelar los presupuestos.

Hecha la independencia las opiniones de los políticos se encontraron fuertemente inclinadas a una imitación de las ideas y prácticas de la revolución francesa, que se creían apropiadas para curar a la nación de todos los males atribuidos al gobierno español y para hacer que surgiera un México lleno de nuevas energías y en condiciones de desempeñar un magnífico papel en el concierto de los pueblos. La imitación de la revolución de independencia de los Estados Unidos no sedujo mucho a nuestros políticos porque esa revolución había sido mucho más tranquila, menos sensacional, menos trágica, y menos susceptible, por lo tanto, de impresionar a los temperamentos ardientes y al grupo muy numeroso de personas incultas que, por desgracia, formaban la gran mayoría y constituían una fuerza social que todos las partidos políticos quisieron aprovechar.

Pero la Constitución de los Estados Unidos tenía un detalle que cuadraba mejor con las ambiciones de los políticos mexicanos que la constitución francesa, que era el régimen federal. La Federación prometía aumentar el número de partidarios políticos satisfaciendo las ambiciones del caciquismo. Se adoptó, pues, el sistema federal, haciendo un movimiento inverso del realizado en los Estados Unidos; pues mientras aquí la federación era un paso hacia la unidad que todo hombre patriota quería para su país, porque en la unidad está la fuerza, en México de la unidad sólida y fuerte que había dejado constituida el gobierno español, se quiso hacer una federación, es decir, un desmembramiento de las diversas partes del país, partiendo de la ficción enteramente extraña a la realidad histórica, de que las diversas intendencias de Nueva España habían sido estados soberanos y que en uso de esa soberanía habían celebrado una alianza o pacto federal para constituir una nación.

Desde entonces, en el fondo de la historia de México se observa la lucha entre la ficción constitucional de la federación y la realidad de la vida del pueblo que constantemente exige el centralismo.

Las finanzas de la Nueva España quedaron igualmente destrozadas con el sistema federal. Cada uno de los Estados se apresuró a aprovechar para fines que sólo interesaban a sus políticos los productos de las diferentes rentas que antes, unidas, constituyeron la fuerza económica de la más brillante de las colonias españolas. La ficción federal, precisamente porque era producto de un artificio de los políticos, fué llevada, con rigor lógico, a aplicaciones en el orden fiscal. Partiéndose del principio de que las intendencias eran estados soberanos tenía que concluirse que esos estados poseían el dominio eminente sobre las propiedades territoriales y que, por lo tanto, a esos Estados correspondía exclusivamente establecer contribuciones directas que afectaran la propiedad territorial; y la Federación, como producto de un contrato supuesto celebrado entre los diversos estados, quiso limitarse a contribuciones indirectas sobre las operaciones del comercio diario.

Así, pues, la Federación en México se ha reservado esos impuestos indirectos, dándoles diferentes formas fiscales, las principales son los derechos sobre el comercio exterior, correspondientes a exportaciones e importaciones y el impuesto del timbre que se causa con motivo de todas las transacciones, pequeñas o grandes.

También tiene la federación otros recursos como son los productos de la venta de terrenos baldíos, aun cuando se consideró que el dominio eminente sobre la tierra corresponde a los estados y, por lo tanto, las ventas de esos terrenos debían der ser en bien de los mismos estados. Mas aunque no ha habido razón jurídica que aducir en favor de la propiedad federal, lo cierto es que sólo corresponde a los estados un tanto por ciento de esta propiedad.

La Federación cuenta con el impuesto sobre las minas, y con el producto de las patentes y marcas de fábrica, así como algunas otras rentas. Los estados por su parte tienen las contribuciones directas sobre las propiedades rústicas y urbanas, así como también una contribución sobre los giros mercantiles y negociaciones industriales, translaciones de dominio y, en muchas partes, impuestos sobre capitales garantizados con hipotecas. En cuanto a los municipios, unas veces el gobierno del estado colecta todas las contribuciones y divide una parte entre los diversos municipios de su territorio, en otras ocasiones les asignan determinados ramos de tributación, y ellos gozan de cierta libertad en la fijación de la tasa. Generalmente esos ramos son patentes sobre el comercio, derechos de plaza, impuestos sobre abastos, licencias de diversiones públicas, así como multas por faltas contra los reglamentos de policía. De esta manera la esfera de acción fiscal queda perfectamente dividida sin posibilidad de que una autoridad invada la esfera de la otra.

On invitation of the chairman, Gen. F. D. Légitime, of Haiti, addressed the section as follows:

Messieurs: Vous nous demandez d'indiquer aujourd'hui les causes de la guerre. C'est un sujet qui préoccupe tous les membres du Congrès, mais qui demande en raison de son importance, à être traité après mur examen.

S'il s'agit d'exprimer à cet égard une simple opinion, je vous dirai que la guerre, selon moi, semble avoir des causes aussi diverses que les passions humaines.

Mais considerée au point de vue scientifique, la guerre apparait comme un simple phénomène de physiologie caractérisé par des moyens naturels d'at-

taque et défense, dont sont munis tous les organismes, chacun, en raison de son espèce.

Ce phénomène que Darwin appelle "struggle for life" n'a pas d'analogie avec la guerre que se font les hommes pour s'entretuer.

Il est vrai que les "razzias" pratiquées chez les sauvages en vue de se nourrir, peuvent être assimilées à ce genre de lutte; mais on ne saurait admettre que, parmi les civilisés, l'orgueil, l'égoisme, les rivalités s'en fassent un titre pour justifier leurs ravages, après avoir dit à la victime, comme le loup de la fable: "Tu as troublé mon breuvage."

La guerre entre ces hommes est certainement moins raisonnable et aussi sauvage que celle des cannibales. Aussi, vous louera-t-on, MM. de vos généreux efforts et des sacrifices que vous vous imposez pour faire entrer partout dans les cervaux l'idée du droit, et faire par elle régner la justice, l'équité parmi tous les peuples.

En vous parlant ici du droit, je ne fais aucune abstraction du droit à l'existence, à la liberté, à la proprieté, droit que vos pères et les nôtres ont défendu avec un légitime orgeuil: Ce sont, eux aussi, des droits naturels qui, en vue de la défense, justifient la guerre; et celle-ci, considérée comme phénomène de physiologie, répond à des nécessités impérieuses de l'existence humaine.

Enfin, Messieurs, puisque nous avons, sans le vouloir, effleuré le sujet permettez d'attirer votre attention sur un théâtre où la guerre, pendant longtemps, a paralysé tous les efforts.

On a eu, surtout en ces derniers temps, à parler beaucoup de la République d'Haiti; et ceux qui ne la connaissent pas, cette république, ont pu s'en faire une fausse idée, écoutant moins sans doute la voix de ses admirateurs que celle de ses détracteurs.

Mais vous, qui connaissez l'histoire de chacun des états de l'Amérique depuis leur émancipation politique . . ., vous ne vous êtes pas laissé suprendre par une propagande faite à dessein de déprécier un pays que, jadis, la Providence a fait apparaître aux yeux étonnés de Colomb pour lui faciliter la découverte du Nouveau Monde.

L'histoire politique d'Haiti est pareille à celle de tous les autres Etats de l'Amérique Latine; et si l'on peut médire de certains de ses gouvernements, il n'est pas moins vrai que, socialement, ce pays est constitué sur les mêmes principes que les autres Républiques.

Mes compatriotes et moi, en venant prendre part au Congrès, nous devrions chacun apporter un Mémoire destiné à fixer l'opinion sur le Droit public, le commerce et les finances du pays; mais de temps était court. Dès le lendemain du jour où nous avons eu l'honneur de recevoir votre gracieuse invitation, il nous fallait nous embarquer sur le "Nickerie" pour nous rendre à New York.

Les Membres du Congrès, déjà au courant des affaires de l'Amérique, ne peuvent certainement manquer de données sur l'état général d'Haiti. Néanmoins, je puis, pour la section dont je fais partie, les résumer, ces données, de la manière suivante:

Commerce.—En régard de la population, le commerce d'Haiti est restreint par rapport à l'impôt qui, frappant les produits à l'importation et à l'exportation, en arrête le développement. Or son commerce, en raison de cette entrave, est estimé seulement à *cent millions de francs*, importations et exportations réunies.

Taxation.—La taxe sur la marchandise en Haiti est certainement hors de proportion; elle a été au moyen de droits additionnels sucessivement élevé de cinquante à 100 pour cent. pour certains articles.

Finance.—La dette publique d'Haiti n'est pas considerable, étant de 25 millions de dollars; mais elle est génante par rapport aux faibles ressources du trésor, évaluées au chiffre de 7 à 8 millions de dollars.

L'état difficile créé par ces deux entraves, taxations et dette publique constitue le vrai mal du pays, mal économique, dont les crises se manifestent en ce qu'on nomme *revolutions*, et qui, en réalité, ne sont que des émeutes, des "revolutions de palais."

N'y aurait-il pas moyen de débarrasser Haiti de ce mal dont tous les Etats ont eu, comme elle, à éprouver les effets.

Pour y remedier, il y aurait trois moyens puissants: l'apport des capitaux, la création des débouchés et la modification du tarif douanier.

Pour les capitaux, il faudrait simplement, dans l'actualité, créer, une Institution de crédit destinée à fournir à des *groupes d'agriculteurs* regulièrement constituées, des fonds suffisants à l'achat du matériel nécessaire et aux salaires du travailleur. Le capital de cette institution, qui serait au début de *douze millions* de dollars, garantis par le Gouvernement haitien, constituerait un fond public, dont la valeur serait remboursée dans un dédai convenu.

Et, en attendant que l'acroissement de la richesse publique permette au Gouvernement de modifier les tarifs de douane, de façon à relever la valeur des produits de notre exportation, voici l'idée que j'oserai moi-même suggérer.

Le retrait du papier monnaie ne devant pas s'opérer aujourd'hui dans les mêmes conditions qu'en 1910, le Gouvernement haitien pourrait en vue d'augmenter notre exportation—la grande roue des transactions commerciales dans tous les pays—s'entendre avec la Banque des Etats Unis pour procéder au moyen de dix millions de francs affectés au retrait, et par entremise des agents de cette banque, à l'achat des denrées, telles que sucre, alcool, maïs, arachides, fruits et autres, affranchies de tous droits et dont la valeur réalisée à l'étranger, ferait retour à cette banque.

Les dix millions de francs constitués en une caisse métallique seraient representés dans la circulation par des billets remboursables aux porteurs, suivant les termes de la convention du 18 Octobre 1910, passé à Paris.

De son côté, le Gouvernement haitien sous le contrôle de qui les achats devront avoir lieu, prendrait toutes les mésures d'administration propres à faciliter le développement, le transport et l'écoulement des dits articles d'exportation.

Conclusion.—En ces quelques lignes, hâtivement rédigées, nous croyons avoir d'une manière suffisante, exposé la situation économique et financière d'Haiti, indiqué en même temps les moyens que semblent propres, dans l'actualité, à y remettre les choses en mouvement, à en améliorer les conditions et à donner enfin une base à toutes les affaires qu'on voudrait enterprendre dans la suite.

Par l'emploi de ces moyens, le papier monnaie, (une minime quantité de 15 Millions environ), qui circule dans le pays, serait *stabilisé* comme bons du trésor, et l'on se hâterait dans quatre ans à en operer définitivement le retrait, alors devenu plus facile et moins compromettant qu'à l'heure actuelle.

Haiti est, comme chacun le sait, un pays riche en ressources naturelles. Pourquoi sa production, à l'instar de celle de Cuba et de la Jamaique, ne trouverait-elle pas à se placer sur tous les marchés du monde? Sa population, intelligente et laborieuse, ne serait jamais troublée si les *sans travail* ne s'y trouvaient en trop grand nombre.

Qu'on lui vienne en aide, cet important pays.

Et puisqu'il est entré de plein gré dans le *Pan Américanisme*, il doit compter sur un appui, non seulement international au point en vue du droit mais encore d'économique social et financier; c'est l'espoir de son peuple et celui de ses délégués au SECOND PAN AMERICAN SCIENTIFIC CONGRESS.

The following paper by Señor Serapio Hernández y Hernández was read by title at this session:

RELACIONES GENERALES ENTRE LAS RENTAS FEDERALES, DEL ESTADO Y LOCALES.

Por S. HERNÁNDEZ Y HERNÁNDEZ,
Director General de Rentas de Honduras.

Supongo a los hombres llegados al punto en que los obstáculos que perjudican su conservación vencen por su resistencia a las fuerzas que cada individuo puede emplear para mantenerse en ese estado. ROUSSEAU, *Contrato Social, Cap. VI.*

"Los hombres deben vivir antes de escribir." Para escribir algo que sea digno de la atención de los lectores, ha de ser preciso hallarse convenientemente preparado; y esa preparación solamente la dan el estudio y la meditación perseverados, o el haber vivido mucho en la observación de los fenómenos sociales. El que suscribe se halla muy lejos de los casos que preceden.

Entiendo por Federación el conjunto de relaciones entre los Estados, Corporaciones o individuos que se alían por medio de tratados, pactos o convenciones para auxiliarse mutuamente y facilitarse el cumplimiento de sus fines. La Unión, es un sentimiento que palpita ardientemente en el alma de la juventud Centroamericana. Las Repúblicas de Centro-América, que ya estuvieron unidas aunque por tiempo muy efímero, reconocen la necesidad de volver a la Unión. La Constitución Política de la República de Honduras, C. A., en su Art° 1° consagra esta declaración: " Honduras es un Estado, disgregado de la República de Centro-América. En consecuencia, reconoce como una necesidad primordial volver a la Unión con las demás secciones de la República disuelta. . . . ." Antes que la conveniencia o la necesidad, ha de tener por causa la Federación de los Estados el perfeccionamiento y bienestar de los pueblos y los hombres.

Los Estados federados se rigen por una sola Constitución o Ley fundamental que se denomina Constitución Federal; pero cada Estado, para su régimen interior, se da su propia Constitución, en armonía con los principios cardinales contenidos en la Constitución Federal.

En el sistema republicano el Gobierno se ejerce por tres Poderes independientes: Legislativo, Ejecutivo y Judicial. El primero de estos poderes se ejerce por un Congreso de Diputados y tiene en sus atribuciones la de "fijar anualmente el presupuesto de gastos, tomando por base los ingresos probables."

Si es una facultad exclusiva del Poder Legislativo del Estado fijar anualmente el Presupuesto de Gastos sobre la base de los ingresos probables que no son más qu el producto de las rentas de ese Estado, esa misma facultad corresponde, de manera atributiva, al Congreso Federal.

La relación de la Federación al Estado y de éste a lo Local, es la misma que existe o debe existir de lo uno a lo mucho; de lo menos a lo más; de lo simple a lo complejo y de las partes al todo, conjuntamente. Puede el Estado legislar, como en efecto legisla, en orden a sus rentas para el servicio de sus propias necesidades interiores, y la Federación en orden a las necesidades del Todo conjuntamente, y a cada una de sus partes, o a una o más de ellas según las circunstancias y peculiaridades del lugar.

El Presupuesto es la Ley que rige los actos de la vida económica de la Federación, del Estado, de las Corporaciones, Instituciones y aun de las personas que por razón de método viven arregladas a los preceptos: *producir para gastar; producir más y gastar menos; y no gastar poco ni mucho si no lo estrictamente necesario.*

Así como se alían los Estados y los hombres para defenderse de sus enemigos o para ofenderlos, pueden y deberían aliarse para crear, incrementar, conservar y defender su patrimonio, atendiendo a que la prosperidad de las naciones como la de los pueblos y la de los individuos se determina por su riqueza y bienestar económicos.

A los Congresos Científico Panamericanos corresponderá la gloria de salvar a los países de las Américas de las crisis presentes y de las futuras, considerando que si no ha sido posible hasta hoy la Unión de estos países desde el punto de vista político, debe esperarse, justamente, que lo sea muy en breve en el concepto de las relaciones económicas. Labor laudable y meritísima de verdadero panamericanismo será la de que los Congresos Científico Panamericanos recomienden a los respectivos Delegados la conveniencia de adoptar por parte de sus respectivos Gobiernos un sistema monetario común y práctico; de formar una clasificación de materias imponibles; un solo orden en el sistema tributario y la unidad verdadera sobre leyes arancelarias. Serán favorables a estas recomendaciones las circunstancias muy características que los Estados latinoamericanos tienen el mismo origen histórico, un mismo idioma y una misma literatura,—esto en el concepto etnológico; y en el concepto geográfico, puede decirse que tienen límites naturales perfectamente definidos.

Hereupon, at 12.25 o'clock, the meeting adjourned.

FOURTH GENERAL SESSION OF SECTION IX.

NEW WILLARD HOTEL,
Monday morning, January 3, 1916.

Honorary Chairman, FAUSTO DÁVILA.
Chairman, EDWIN R. A. SELIGMAN.

In the absence of Señor Fausto Dávila, of Tegucigalpa, Honduras, the section was called to order at 10 o'clock by Chairman Seligman.

The CHAIRMAN. The section will please come to order. The program to-day will begin with a discussion of the problems of international trade as affected by the war. The first paper will be presented by Dr. John Bates Clark, of Columbia University, New York, on "Changes in accepted conclusions as to international trade due to (1) Asiatic development and (2) war."

CHANGES IN ACCEPTED CONCLUSIONS AS TO INTERNATIONAL TRADE DUE TO (1) ASIATIC DEVELOPMENT AND (2) WAR.

By JOHN BATES CLARK,
Professor of Political Economy, Columbia University.

The economic fact which transcends all others in importance is the impending industrial transformation of the world. There has taken place in a brief period a far-reaching change affecting the entire process by which mankind gains a living. It is a spectacular phenomenon of "economic dynamics," the science which deals with change and progress in the mode of creating and using wealth.

Of the various transforming movements two are more fundamental than the others. They are migrations, which have peopled new regions of the earth, and mechanical inventions which, wherever they have gone, have radically changed industry. In a sense, both have been in progress from remotest antiquity, but in their vast magnitude and importance, both of them are recent. The trickling stream of immigrants to the American Continent has become as a tidal current; and the mechanical inventions, beginning with the first use of fire by the mythical Prometheus and metal working by the biblical Tubal Cain, began radically to remold industrial life when Watt used fire and iron to make a steam engine. The engine was the immediate precursor of innumerable machines of wonderful power and deftness, capable of making anything and everything with Aladdin-like rapidity. Economically there is more difference between the western world of to-day and that of 1776 than there is between the condition of the world of 1776 and that of ancient Chaldea. In methods of production and in the mode of living which they insure, humanity

has moved farther in 140 years than in the previous 4,000. Our mechanical slaves of the lamp make everything and transport everything, and in industrial effectiveness cause one man to become as a hundred men of former days.

Population has always moved outward from centers of density. It is pushed by the difficulty of making a living in its existing abodes, and is lured by the abundance which free or sparsely settled lands insure. If central Asia be taken as the original center, the eastward movement has been shorter than the westward one, and has encountered a check at the shore of the Pacific. Until our own days the westward movement has encountered no limit. Now, however, it has encircled the globe, crossing the Atlantic Ocean and the American Continents. At the Pacific shore it pauses, not from any difficulty in crossing the greater sea, but because it has no incentive to go farther. On the contrary, there would at first seem to be the greatest economic incentive for a tidal wave of migration in the opposite direction—that from Asia to the Americas. The area of greatest density of population is on one side of the ocean, that of slight density is on the other, and the sea offers no barrier. It is as though the regions were contiguous, and it would seem that, if economic law worked without friction or obstruction, such a wave of migration would occur unless Governments should stop it. It would at first seem also that stopping this movement by crude force would be an action so directly contrary to all economic tendencies as to encounter grave difficulties.

These offhand inferences fail to pay due regard to one of the chief elements in the problem, namely, the transformations of industry that are going on in Asia itself. On these depends largely the question whether the Asiatics will find a sufficent inducement for migration to make them generally desire it.

During the last century and a third machinery has temporarily set at naught the natural influences which determine where particular industries can best be located. Many of them have not been carried on chiefly in the places where the economic forces will, in the end, locate them. A good place in which to make a thing is, in the first instance, wherever the machinery for making it has been invented and introduced, unless very grave difficulties exist in the way of producing it there. Spinning and weaving still find their chief home in the region where power looms and spinning jennys were invented, but that may or may not be the place where a great part of the spinning and weaving of the world can, in the end, be most advantageously carried on. If nature has selected a certain home for an industry, the needed machinery will find its way to it, and one of the main theses of this paper is that the natural home of a vast amount of manufacturing will be found in the lands of eastern Asia.

There is a common impression that manufacturing and an export trade in the products of it constitutes the greatest source of wealth which a people can have, and it is true that, during the period of turning and overturning through which the world has passed since machines began to replace hand labor, exceptional profits have been reaped from this source. It is greatly to be hoped that adequate profits will always be within the reach of the ingenious and enterprising man who discovers and applies a method of multiplying the product that labor and capital create. Whoever by hard study enriches the world even a little should be allowed to take a toll that will enrich him more appreciably. It will be a good bargain for the world, which always gets the lion's share. When the invention shall have become common property, when anybody on the known earth who has the capital to buy a product-multiplying machine is able to get and use it, two things will happen: First, the consuming public will have the entire benefit from the improvement; and, secondly, the industry that uses the

machine will slowly concentrate in places in which natural resources abound and labor is efficient and cheap.

Necessity has been called the mother of American invention. In this country wages were high because land was fertile and abundant and a worker could get a large return by tilling it. Naturally he would not desert the farm for the mill unless he could get wages which would put him on the plane of comfort enjoyed by the farmer. The owner of the mill, competing as he did with manufacturers of older countries, could not pay the high wages unless he could manage to get a large output of goods, or a high price for them, or both. A protective tariff gave him the high price, not without a tax on the consumers; but easier production of the goods themselves was still necessary, and that was possible only by means of machinery.

It is true that America has been compelled to be inventive in order to succeed in mechanical industries, and that her ample machinery long gave her an advantage over other lands. It is true at present that the same thing still gives to America and Europe an advantage over Asiatic countries; but, in the nature of the case, this advantage must be temporary unless the western continents continue to lead in invention. There is a highly efficient rival on the Asiatic shore. Japan has made a brilliant record in the brief period since she began to adopt western arts, and she is likely to carry them into extended regions that fall within her commercial and industrial influence. The ingenious Yankee will have to do his best if he retains for his country the degree of preeminence it has thus far enjoyed. With appliances as good as ours and workers as well trained the East can beat us in the competitive struggle for cheap production. In ability to thrive on low prices for their goods no region can surpass one that has labor which is abundant, cheap, naturally efficient, and provided with the best mechanical aids.

The paradox in the situation lies in the fact that, in a true sense, natural wealth of certain kinds may offer an insurmountable obstacle to a manufacturing industry. In the years following 1849, while California was reveling in the returns of gold mining, it would have been useless to build textile mills there. They would have been failures from the start. Their employees could only be attracted by wages comparable to those they could get by washing out gold dust from the placers, and that rate no mill owner could pay. Woolen goods could be far more easily procured by working in the placers and sending around Cape Horn or across the Isthmus of Panama gold enough to buy them than could possibly have been gained by diverting labor from the mining operation to making them in California itself. The present returns from fruit cultivation and other agriculture in that State still preclude a relatively large development of staple kinds of manufacturing.

Where is the most congenial territory for the greatest manufacturing operations of the world? It is where population is dense and wages are low because of that density. It is where there are not enough placers, or ranches as productive as placers, to employ any large portion of the people. It is where agriculture is so intensive that the yield per capita is small and the pay of the laborer is equally so, and that means eastern Asia. It is there that, under the leadership of Japan, a transformation has begun which is bound in time to be vast and brilliant. The machines of the West will be carried there and the orientals, who are not merely imitative, as was once said, but inventive as well, will use and copy them and will do their part in improving them. In textile working, in metal working, in shipbuilding, in the making of machines themselves, the east, by virtue of its present comparative

poverty, has special facilities for manufacturing; and any young boy now living who shall reach the age of "threescore years and ten" will see Asia well advanced toward the position of the leading workshop of the world. Startling as may be political developments in Asia, the industrial development which is plainly impending is even more fundamental, and it will have its effect on the fortunes of all mankind.

A number of facts are of vast importance to the eastern world, which they primarily concern, and scarcely less so to the western world itself:

1. The change which is foreshadowed in their industries will help to detain oriental peoples in their own homes. Commerce with eastern countries will largely take the place of immigration from them. The new industries transplanted to the east will, in their new habitats, increase the productivity of labor and raise its pay. As between the mills, mines, railroads, steamship lines, etc., developed in their own countries and the fields of labor across the sea, an increasing number of orientals will choose the former.

2. They will find their first markets for finished goods in their own countries, and importations from abroad, though they should continue in undiminished amount, will furnish a steadily lessening fraction of the whole consumption.

3. Migrations within the vast empires of Asia will greatly exceed migrations from them. Sparsely settled hinterlands of the Chinese Empire and the vaster solitudes of Siberia will see repeated what took place in the occupation of the Mississippi Valley.

4. Their home market for industrial products will be enormously increased as soon as, on lands of this kind, agriculture of the extensive type rather than the intensive one shall be practiced. Tillage there will be carried on more and more with the kinds of machinery now in use in the West, and farms in Siberia and elsewhere will come to resemble those of our own Dakotas, and will furnish a vast quantity of raw produce and a market for the sale of finished products.

5. The impulse to migrate to distant lands, which, as stated, will be checked because of the more ample field of employment at home, will be further checked by the increased wages there to be had in all branches of industry. The transformation of Asia will bring the earning power of its people and their standard of living much nearer to that of the peoples of the West than it is to-day.

6. There will be, from an early date, a certain amount of exportation of oriental goods to the western world, the prospect of which was once styled the "yellow peril" in industry. The danger will be small so long as Japan and eastern China seek and find their principal markets—first, in their own homes and, later, in western China and Siberia. All the while, however, they will send some products hither and yon to remote corners of the world.

7. In the end a world-wide adjustment will take place, into which more elements will enter than can be foreshadowed here. A vast and intricate problem will remain to be solved by men who shall come after us and be in possession of more facts than are now available; but the key to the solution will be found in the rule of conforming to nature and not opposing her, and in a public policy that cooperates with natural forces and makes the most of them. It is a safe prediction that the new commerce may thus be made to benefit east and west alike.

What it is perfectly safe to predict is the industrialization of vast populations on the western shore of the Pacific sea. It will tend to prevent the peo-

ple from coming in great numbers to our side of it. Perhaps the strongest commercial affinity anywhere existing will be between Japan and China; later it will be between these two countries on the one side and Siberia on the other. For a time this in itself should not prevent but should rather stimulate the movement of American machinery to the lands that are adopting western methods. Exclusion acts may keep the Chinese from coming to us, but they can not keep our arts and tools from going to them. Nothing can prevent them from perceiving the advantages of multiplying their products by the aid of machinery.

It may be thought that, in the course of a generation or two at least, this may cause an inundation of Asiatic goods in both of the Americas and Europe. The facts just cited greatly modify that conclusion. There will be commercial streams but no inundations, and a fuller study than is here possible will show that, in both of the Americas at least, such streams as do flow in this direction can be made to be advantageous. We have considered solely what natural economic forces will bring about, not what legislatures may do on either side of the sea. We say nothing of sociological hindrances to the migration that pure economics alone might call for.

Such a transformation of Asia as is pictured can not occur in a year, in a decade, or a half century. More than one century will doubtless pass before it shall be fully consummated. It will be rapid enough to justify the prediction of a Chinese statesman, who said to a western visitor: "Why do you wish to wake us up? If we wake up we shall go fast and we shall go far—farther than you wish." In its myriad of workshops the western world is employing the mechanical giants which stand for genii of the lamp in the oriental tale, and the eastern world will be quick to press them into service. Their fabled Aladdin will be outdone by the flow of products which the new agents will conjure out of the earth and the shop. There will be enough to lift these peoples to a far higher level of living than they have ever yet enjoyed, and the western world itself will be the better for it.

What connection has the present war with this? It has lasted a year and a half, and during its continuance a great source of supply of many articles has been cut off. That also means that, for the west, a great outlet for ordinary export trade has been closed. The outer world can neither send as many products of the usual commercial kinds to the warring countries nor get as many from them as it formerly did, and it is thrown in an increased measure on its own resources. It may have to continue still longer to lead a comparatively self-contained life, making, in the main, the goods that it consumes. This means a forced development of many an industry in the west, and it will teach this part of the world where and how its own resources may best supply what it can no longer procure from its usual source. It is searching new regions and testing their capabilities and revealing new and favorable geographical homes for many an enterprise. When the war shall end the former source will be reopened and traffic, in somewhat diminished volume, indeed, will begin to follow its former lines; but if the industrial forces of the west have in the previous interim been wisely directed their results will be permanent, and the west and the extreme east alike will be the better for it. The war has transformed much of the neutral world into a vast laboratory for testing in many places the possibilities of new types of production and ascertaining which of them are so permanently useful to mankind that they have the right to live. The so-called "economic harmonies" rule where nature is consulted in the shaping of human projects, and east and west, north and south

are benefited by every economic movement that can endure her stern test of survival. If a product of the mills of the United States can benefit Europe, South America, or Asia and remote Africa by going to them, it will continue to go there, and not otherwise. If Asiatic products can benefit any of our lands by coming to them, they will come and, in any event, the "mighty and puissant nations" of the east, that are "rousing themselves as strong men out of sleep," will have their full share of giving and receiving benefit from the world transformation. For Governments on every one of these continents the great problem of the immediate future will be, how to conform to natural tendencies and to foster activity in every line in which it makes for common benefit. Innumerable such lines will reveal themselves, and if we find and utilize them, the harmony of interest in the economic sphere will be as a foundation of rock for the political harmony which we all desire.

The CHAIRMAN. I am sure that we would all be delighted to start at once a discussion of this most suggestive and interesting paper, but I think it would be better to have all of the papers read first and then, so far as there is time, we shall have a discussion of all the topics together. Therefore, in continuation of this general subject, I shall now call upon Hon. George E. Roberts, of the National City Bank, of New York, who is going to speak to us on "Effects of the war upon the trade of South America."

EFFECTS OF THE WAR UPON THE TRADE OF SOUTH AMERICA.

By GEORGE E. ROBERTS,
National City Bank, New York City.

When the war broke out the three countries upon the east coast of South America were already suffering from the effects of a severe financial crisis, due in part to poor crops or low prices for their principal products, in part to a curtailment of credit facilities in Europe, and in part to a reaction from a very active period of development, with the usual accompaniment of speculation and credit expansion.

Brazil was very prosperous for several years, while high prices were prevailing for her two most important products, coffee and rubber, and the Government undertook on its own account and encouraged private parties to undertake extensive development projects which had been partly financed in Great Britain and Europe but had not been fully financed or reached full productiveness when the alarm engendered by the first and second Balkan wars closed the financial markets to further advances. Construction work generally had to be suspended, and the sudden cessation of these large expenditures was seriously felt. About the same time the competition of plantation rubber began to severely affect the native rubber industry of Brazil. The price of rubber fell to about one-fifth or one-sixth of the price that had been prevailing. The price of coffee was also seriously depressed.

Argentina likewise had been very prosperous. It had been favored with good crops for a term of years, and its products had commanded good prices. The profits of agriculture and of stock raising had been large; the prices of lands had risen rapidly in consequence; the wealth produced by the soil had also enriched the cities and they had flourished, expanded, and, in some respects no

doubt, overdone their development. Foreign capital had been flowing into Argentina for investment, and this movement was affected, as in Brazil, by the Balkan wars. A serious calamity to the crop of 1913–14 turned the exchanges adversely, forced a curtailment of credits, and as the situation was ripe for reaction a financial crisis resulted.

The conditions in Uruguay were similar to those in Argentina, although the crisis was less severe. Paraguay should also be grouped with the countries of the eastern coast, and was subject to the same conditions. All of these countries were at the lowest stage of depression when the great European war broke out, and the situation that has existed during the past year, therefore, represents the combined effects of the original crisis and the war. South America must have felt the effects of such a war in Europe severely at any time, owing to her financial dependence upon the countries involved, but in the case of the three countries first named the outbreak came at a time when they had the greatest need for their established financial connections. So far as Argentina and Uruguay are concerned, the war has since had compensations in the high prices afforded for their crops harvested and sold during the past year, but the other countries have not been benefited in the same degree. Chile was seriously affected by the cutting off of its nitrate shipments. The normal exports of nitrate are approximately 3,000,000 long tons in a year, of which about 70 per cent has gone to Great Britain and Europe, 20 per cent to the United States, and 10 per cent elsewhere. The product was especially in demand for fertilizing the sugar beet, and Germany was one of the best customers. In the early months of the war the production of nitrate was greatly reduced, but later the demand for the manufacture of munitions developed to such an extent that the price is now higher than before the war, and the works are resuming full operations as fast as they can reorganize their working forces. The demoralization of the nitrate business seriously impaired the ability of Chile to continue importations, and for the first six months of 1915 the total of all importations, in United States currency, was $23,270,655, against $53,467,543 in the same months of 1914—a falling off of about 60 per cent.

The other countries of South America—to wit, Colombia, Venezuela, Bolivia, Peru, and Ecuador—have suffered in the volume of their foreign trade, both exports and imports diminishing. Generally speaking, it has been a year of stagnation in South America, although some important mining development by American companies has been proceeding in the countries of the west coast, and some construction work, on a reduced scale, has been going on in Argentina. This situation has meant a serious degree of unemployment and reduction of importations, not only in materials for construction but of articles of household use and of all goods not strictly necessaries and whose purchase could be postponed. Economy and retrenchment have been the order of the day.

The customs' returns for Argentina show that for the nine months, January to September, 1915, the total importations of iron and its manufactures had fallen off more than 50 per cent; manufactures which come under the heading "Locomotion," presumably railway rolling stock and automobiles, etc., more than 75 per cent; electrical supplies, over 50 per cent; and building materials, approximately 50 per cent. These comparisons are with the first nine months of last year, which was a period of unusual depression and included two months of the war time. When this is understood it will be seen that the decline from normal conditions was very great.

The official statement was as follows:

Imports.	Value in gold.	Comparison with first 9 months of 1914.
Live stock	$874,468	$136,669
Foodstuffs	17,261,016	1,194,865
Tobacco and its applications	4,705,886	230,478
Liquors	4,612,177	1,648,663
Textiles and artifacts	35,181,165	9,039,120
Oils, fixed, mineral, volatile, and medicinal, and greases	22,144,240	8,366,315
Chemical and pharmaceutical substances and products	7,944,433	1,390,038
Colors and dyes	1,114,931	370,065
Wood, other fuel substances, and their artifacts	2,990,021	1,934,439
Paper and its artifacts	4,218,408	1,860,789
Leather and its artifacts	1,416,945	806,579
Iron and its artifacts	14,073,661	16,735,246
Other metals and their artifacts	4,449,775	2,208,196
Agriculture	2,983,254	848,469
Locomotion	4,779,272	16,706,320
Stone, earth, glazing and ceramic products	16,130,194	8,087,335
Building	8,929,969	7,114,306
Electrical	2,818,230	3,374,399
Various articles and manufactures	3,265,754	4,606,510
	159,853,319	67,403,939
Live-stock products	126,766,416	9,944,818
Agricultural products	269,354,774	126,358,101
Forestal products	12,131,931	5,091,148
Mineral products	26,592	47,331
Chase and fishery products	1,351,238	293,825
Miscellaneous products	4,299,256	2,843,216
	413,930,207	144,483,777

The total imports of Brazil for the seven months, January to July inclusive, in 1913 amounted to $205,420,000, in 1914 to $133,985,000, and in 1915 to only $83,200,000, or a reduction from 1913 to 1915 of about 60 per cent.

The number of tons of merchandise and products received at the port of Montevideo, the principal port of Uruguay, in the first six months of 1915 was 467,255, as against 726,217 tons in the first six months of 1914, and 774,243 tons in the corresponding period of 1913.

As illustrating the curtailment of expenditures in articles for household use we may take sewing machines, which have been supplied almost wholly from the United States. The exports of sewing machines from the United States to all South America in the first nine months of 1913 were valued at $2,614,885, and for the first nine months of 1915 they were valued at $273,459 of 1915, a decline of almost 90 per cent. The demand for boots and shoes is more imperative, but exports of these from the United States fell from 1,115,000 pairs in the nine months in 1913, to 984,000 pairs in the corresponding months in 1914, and 786,000 pairs in the corresponding months in 1915—a decline from 1913 to 1915 of 29 per cent. Furniture is a class of goods in which our trade to South America was growing. In the first nine months of 1913 our exports under this heading were $1,098,632, and in the corresponding period of 1915 they were $299,786. Lumber enters into construction. In the first nine months of 1913 our exports of lumber to South America amounted to $7,367,255, and in the corresponding period of 1915 to $2,182,671. Our sales of typewriting machines during the nine months' period of 1913 amounted to $781,778, in the corresponding period of 1914 to $403,818, and in the like period of 1915 to $258,682. Of agricultural implements the United States sent to South America, in the nine months' period of 1913, $5,277,222 worth, in that period of 1914, $1,840,——

worth, and in 1915, $2,392,527. In this case there was a recovery from 1914 due to more favorable crop conditions.

These are noteworthy instances of reduced importations from the United States, illustrating the contraction of South American purchases. On the whole, however, as might be expected, the United States has fared much better than its competitors in the South American trade, particularly since the outbreak of the war. Germany and Austria-Hungary have been the chief sufferers, their enemies being in command of the sea. In the last year of normal business (1913) Great Britain supplied 26 per cent of the imports of South America, Germany 24 per cent, France 11 per cent, Italy approximately the same as France, and the United States 16 per cent. In 1915 the trade of Germany has been practically eliminated; Great Britain has fared rather better than France, and the United States, although in the early months of the year below previous records, is now running ahead of 1913, and will show an increase for the year.

In the important line of cotton piece goods, comparing the nine months' period of 1915 with the corresponding periods of 1913 and 1914, we find that in the case of Great Britain the total exports to Central and South America fell from 458,000,000 yards in 1913 to 230,000,000 yards in 1914, and 213,000,000 yards in 1915. Here, again, we see the principal decline was in 1914. Of woolen and worsted goods the exportations to the same territory in the same periods were 9,500,000 yards in 1913, 5,800,000 yards in 1914, and 2,300,000 yards in 1915. In carpets and carpet rugs the figures were 744,000 yards in 1913, 325,000 in 1914, and 78,000 in 1915.

The exports of cotton piece goods from the United States to the same territory in the same periods increased from 59,500,000 yards to 65,500,000, which was only a little better than holding our own. The reduction of importations in this line from Great Britain, Germany, and France was evidently offset by a reduction of consumption and of merchants' stocks, with possibly some increase in home production, although the latter could hardly have been important, as importations of textile machinery were practically suspended. A curtailment of this kind extending over two years must have been accomplished by a general clearing out of stocks, and reports agree that this has been the case.

The restrictions that have been placed upon the exportation of British coal have turned to the United States a considerable volume of orders for both coal and fuel oil. The exports of coal, in tons, from Great Britain to the four leading countries of South America for the first nine months (January to September) of the last three years are given below:

To—	1913	1914	1915
Brazil	1,445,740	966,618	424,282
Uruguay	568,142	480,522	252,358
Argentina	2,725,308	2,362,722	1,289,440
Chile	457,641	360,391	38,655

The exports of coal, in tons, from the United States to Brazil, Uruguay, Argentina, and the other countries of South America are given by the customs returns as follows:

To—	1913	1914	1915
Brazil	211,045	201,071	544,194
Uruguay	5,163	61,443	135,066
Argentina	55,877	193,786	719,019
Others	1,004,508	1,459,292	1,167,260

In iron and steel manufactures the United States has done considerably better than hold its own relatively, although in many articles the actual amount of exports has been reduced. The gains are largely due to the aggressive policy of the United States Steel Corporation, which has established warehouses in 15 cities of South America, from which orders are promptly filled, and has been an active competitor for construction contracts wherever a large consumption of steel was involved. Window glass, hitherto never an article of export from the United States, has been going out this year in important quantities to South America and the West Indies. The disappearance of Belgian manufacturers from the field has had much to do with this development. In chemicals the United States is doing a large trade. Caustic soda, formerly obtained altogether in England, is now supplied regularly from this country. Chloride of lime, for cotton mills and other uses, has become an important item of our exports. Tin plate is being exported in important amounts from this country, the movement to Argentina rising from 846,000 pounds in the first nine months of 1913 to 24,000,000 pounds in the corresponding period of 1915. A considerable increase is noted in our exports of dried fruits, canned goods, flour, and other food products. Paper and printing materials, formerly supplied largely by Germany, are now obtained mainly from the United States.

These are some of more noteworthy examples of lines in which South American requirements have been turned to the United States. There has been development in many lines, scattered all over the list of the commodities of trade. That this is so is evident from the fact that notwithstanding the reductions to which reference has been made, and in other lines, the total movement of goods from the United States to South America for this year will show a very considerable increase over any previous year.

In the matter of exports in 1915 South America has held up better than in imports. Argentina has made a good recovery since the crop of 1914–15 began to move out, and for the first nine months of this year the value of its exports was $413,930,207 Aregentine gold, against importations of only $159,853,319, a trade even more one-sided than that of the United States. This is the highest figure for exports in nine months ever reached, the figures for the corresponding period of 1913 being $396,624,216.

The merchandise exports of Brazil for the first seven months of this year were approximately $135,000,000, as against $155,000,000 for the corresponding period of 1913.

A much larger share of the exports of South America are now coming to the United States than ever before. This is not due entirely to the war, but partly to the fact that meats and wool, formerly dutiable, are now on the free list, and other changes favorable to importations have been made in the tariff schedules of this country.

The movement of coffee from Brazil to the United States in the first nine months of this year aggregated 568,000,000 pounds, against 499,000,000 pounds in the corresponding period of 1914 and 364,000,000 pounds in that period of 1913. From Central America and Honduras our importations of coffee doubled, and from Venezuela and Colombia they increase largely. The movement of cocoa to this country shows a similar development.

The total importation of hides into the United States from South America in the first nine months of 1913 was, in number, 39,738,000; in the corresponding period of 1914 it was 101,352,000; and in the same months of 1915, 172,310,000. Importations of rubber have risen for the same periods from 32,000,000 pounds in 1913 to 42,000,000 pounds in 1915. The importations of carpet wool into the United States from Argentina during the first nine months of 1914 aggregated

3,993,062 pounds and for these months of 1915, 11,958,000 pounds. The importations of sugar into the United States from South America for the nine months under review were approximately 3,000,000 pounds in 1913 and 117,000,000 pounds in 1915.

The totals for the trade between the United States and the countries of South America, Central America, and Cuba, January to September, for the three periods under comparison, are as follows:

	1913	1914	1915
Imports from—			
South America	$139,072,878	$173,306,274	$229,501,940
Central America	14,321,909	13,995,379	17,068,373
Cuba	110,428,144	128,122,506	168,791,364
Exports to—			
South America	110,244,795	73,692,547	103,534,615
Central America	30,901,633	29,548,420	26,827,782
Cuba	53,548,679	49,574,184	62,532,776

The exports from the United States to all South America for the months of July, August, and September of the last three years have been as follows:

	1913	1914	1915
July	$11,682,492	$7,828,388	$12,572,190
August	12,280,952	5,312,457	13,450,240
September	12,043,824	8,290,184	16,938,718
Total	36,007,268	21,431,029	42,961,158

An occasional expression of surprise is heard that the development of trade between the United States and these countries has not proceeded more rapidly, but, if all the circumstances are considered, there is nothing strange about it. As we have seen, the economic conditions in South America at the outbreak of the war were bad, and the people had no desire to buy goods freely anywhere. Credits were in an uncertain state, and the field was not inviting to strangers. Very soon, however, the merchants of this country who had some acquaintance with the trade began efforts to extend their business and showed a disposition to accommodate their customers in the matter of credits. Many inquiries and orders were received for goods of a kind that had been supplied from Europe but with which our merchants were not familiar. Under the conditions new business developed slowly, but a great interest in trade with South America has been awakened in the United States.

To what extent this newly developed trade between the United States and South America will be permanent remains to be demonstrated when the old competitors are all in the field again. There is confidence in this country that the introduction of our goods and the acquaintance that has been obtained will result in a permanently larger trade than has existed in the past. It is recognized, however, that many of the products of South America must find a market in Europe and that the shipping lines will carry goods both ways. This situation is very well illustrated in the coal trade. The best American coal is practically as good as British coal, although it requires somewhat different handling. It can be put into the ship at the ports of this country at a lower price than British coal can be put on board, but, owing to the great tonnage going out from Great Britain to Argentina for foodstuffs, the freight rates over that route are very low. Nevertheless, it is expected that American

coal will retain a footing in South America, and so of many goods now introduced for the first time.

Perhaps this is a suitable place to say that if there is any lesson in economics which everywhere stands out conspicuously amidst the confusion wrought by the war it is the simple but often neglected one that in the long run no country can have great exports unless it is willing to also have great imports. It is useless for a country to aspire to great sales abroad unless it is willing to take its pay in the products of other countries. It goes without saying that no country wants to have exports without receiving pay for them in some form, and there are only three methods by which payment can be made. They may be paid for, to a limited extent, in gold, but trade can not go far on this basis; payment may also be made in obligations—in securities—if the exporting country is willing to accept the obligations of the importing country or of its citizens or corporations. This policy, of course, if continued, means for the exporting country that it will be acquiring a constantly increasing interest in foreign properties. This is true of the creditor countries of Europe, and for a country seeking to enlarge its exports this is the only alternative to receiving a practically equal quantity of imports.

Finally, it is perfectly apparent that in South America trade has been created by investments. The capital for the development of these countries has been supplied by Great Britain and Europe, and it has gone to them mainly in the form of machinery, equipment, and materials for construction work. The railroads and other public utilities are owned in Great Britain and Europe; their head offices are there; the managing officials go out from there, and it is inevitable under these conditions that their purchases of every character shall be generally made there. Moreover, the introduction of tools, machinery, and other goods through these corporations creates a general market for them. The workmen of the country became familiar with them and naturally prefer them. And so in many ways exportations are promoted by investments and the resulting control of important industries. When the full importance of this influence is taken into account it is not strange that other countries have led the United States in the past. Nor is it strange that the people of the United States have not sought investments in South America. They, like their neighbors of all the Americas, have had development work to do at home. They also have been accustomed to look to Europe for capital; and while there is evidence that the United States is no longer dependent upon Europe, and is now in position to make investments abroad, organization and leadership are required for the new movement.

The outbreak of the greatest war in history was a great shock to credit and to enterprise in the United States as elsewhere. It was so appalling in the magnitude of its expenditures and waste, and in its demands for capital that the effect upon all prudent people was very properly to impose restraint and caution. The demands of the warring countries upon the United States for capital have been very large, and they will continue to be large while the war lasts and afterwards. If any explanation is necessary this would seem to be a sufficient one for the apparent failure of the United States to recognize its opportunity in South America. There is a genuine desire among the people of this country to have closer relations with all their neighbors to the southward. It is unpleasant to talk of the present situation as affording an opportunity, while the countries of Europe are in great distress, to win trade from them or displace them from their established position in any field. This is not the attitude which we would take. We do not believe the United States will be more prosperous because of waste and poverty in other countries than it would have been if they had continued prosperous; quite the contrary. But

the waste of capital in the countries which have heretofore financed the development of the world, and the fact that for a time they are incapacitated from continuing that work, imposes an obligation upon the people of the United States to devote their great productive powers to maintaining so far as possible the industrial progress of the world.

Europe, as well as the rest of the world, will be benefited by our so doing. This obligation is recognized, and steps are being taken which it is believed will result in due time in substantial investments of capital in South America, and more intimate relations of every kind.

The CHAIRMAN. Our next paper is by one of our South American friends, Sr. Dr. N. Veloz Goiticoa, of Venezuela, who will speak to us on the "Organization and functions of the finances of United States of America and United States of Venezuela."

LA ORGANIZACIÓN Y LAS FUNCIONES DE LAS FINANZAS DE LOS ESTADOS UNIDOS DE AMÉRICA Y DE LOS ESTADOS UNIDOS DE VENEZUELA.

Por NICOLÁS VELOZ GOITICOA,

Miembro Fundador de la Alta Comisión Internacional de Finanzas de Venezuela.

INTRODUCCIÓN.

La organización de las finanzas de los Estados Unidos es tópico interesante; data su estructura de un siglo y cuarto a esta parte y como aquéllas están llamadas a relacionarse pronto de una manera íntima con las de la América Latina y a dar incremento de mucha consideración a las transacciones mercantiles y de otro género en todo el Hemisferio Occidental, por esta razón ha escogido el suscrito el tema de exponer, aunque sea muy sintéticamente, la organización, las funciones y el estado actual de las finanzas de los Estados Unidos, y rememorar las novísimas medidas dictadas que ponen por primera vez a los Estados Unidos en capacidad de efectuar transacciones financieras en grande escala, o sea de créditos individuales a corto plazo y de créditos gubernamentales o de corporaciones a largo plazo en los países de la América Latina. Este tema comprende igualmente el propósito de dar, aunque sea una ligera idea, del origen, de la manera de funcionar y del estado en que se encuentran actualmente las finanzas de su Patria, Venezuela, y exponerlas ante este Congreso.

PRIMERA PARTE.

Los Estados Unidos adoptaron de Europa el complicado mecanismo de su sistema financiero. Aprobó en 1791 el Congreso Americano la fundación del Primer Banco Nacional y el Presidente Washington autorizó con su firma el ejecútese de ese decreto. Pasaba, en 1812, el capital bancario de los Estados Unidos de 70 millones de dólares. De 1807 en adelante aumentó considerablemente el comercio interior del país y en 1824 se formaron diversas compañías de importancia. Se estableció, por completo, la supremacía comercial de la ciudad de Nueva York en el Hemisferio Occidental cuando quedó terminado el "Erie Canal." Hasta entonces había sido Filadelfia el principal centro mercantil de los Estados Unidos. De 1830 á 1840 hubo mucha agitación financiera y los años de 1837 a 1839 constituyeron uno de los capítulos más interesantes de la historia político financiera de los Estados Unidos, especial-

mente por el antagonismo de Jackson contra el Banco Nacional. La construcción, en 1844, de la primera línea de telégrafo terrestre en los Estados Unidos dió impulso muy grande a toda especie de transacciones. El descubrimiento y explotación de las minas de oro en California contribuyeron a aumentar la riqueza nacional; pero la rapidez con que fueron construídas muchas vías férreas, indujo a especulación aventurada que dió muy malos resultados. El período de la guerra separatista produjo considerable perturbación económica, pues la deuda pública nacional montaba, antes de principiar esta guerra, a 65 millones de dólares y para el año de 1866 había subido a 2,773 millones de dólares. Significó esto una enorme emisión de bonos, que fué colocada, casi por completo, en Wall Street, que deriva su nombre de la primitiva estacada ó pared que protegía de las invasiones indígenas la antigua ciudad holandesa llamada Nueva Amsterdam, hoy Nueva York. Las primeras cotizaciones de las transacciones verificadas en Wall Street se publicaron en 1835 y el año siguiente comenzaron á recibirse con regularidad, por cable, en Nueva York, las cotizaciones bursátiles de Londres; pero data de 1869 la historia de Wall Street tal como funciona hoy.

Hace más de un siglo se computaban sólo en miles de dólares estas transacciones que se efectuaban en Wall Street, después subieron á millones y hoy pasan de billones de dólares. No están claramente definidos los límites del distrito financiero que comprende el nombre de esta calle; pero el centro monetarió de los Estados Unidos no se halla circunscrito a esta estrecha vía pública, que comienza en Broadway y termina, tres cuadras después, en el East River, sino a una sección de la ciudad de Nueva York, en la cual se encuentran los principales bancos, las diferentes Bolsas y las oficinas de las grandes corporaciones. El centro financiero principal de los Estados Unidos puede considerarse comprendido en un perímetro de Este á Oeste a lo largo de Fulton Street o sea de orilla a orilla del río, a través de la Isla de Manhattan que se extiende hacia el Norte hasta Battery Place. Pasan de 500 las instituciones bancarias de diverso género, de inmenso poderío y de influencia decisiva en los destinos de los Estados Unidos, que tienen establecido su centro de acción en este distrito financiero, el cual representa en la América Anglo Sajona, lo que Threadneedle Street ó Lombard Street en Inglaterra; mercado monetario de Londres que tiene carácter esencialmente internacional y es realmente, hasta ahora, el clearing-house o sea el banco de la liquidación del universo.

El mercado financiero de Wall Street es principalmente norteamericano y Nueva York es el clearing-house de medio mundo. Los especuladores de Wall Street se concretan, casi por completo, a negociar en bonos de los Estados Unidos. Como es tan rico el país, tiene más de un centenar de millones de habitantes, es tan dilatada la extensión de su territorio y son tan vastos sus recursos, los capitalistas del país rara vez solicitan otro mercado financiero donde efectuar sus negociaciones, por lo que resulta que el volumen de las transacciones que se verifican en Wall Street, es por lo menos igual al de las de Londres, a pesar de disponer Londres de un radio de acción mucho mayor y de una influencia mundial que es decisiva. Por ahora es Wall Street el segundo mercado monetario del mundo; pero se nota la tendencia evidente de querer trasladarse al Hudson el centro monetario de las finanzas del universo.

En tesis general, las alternativas de épocas de prosperidad y períodos de crisis en los Estados Unidos, afectan el funcionamiento del mercado financiero de la siguiente manera: Después de una época de prosperidad económica, basada en buenas cosechas y en solidez del mercado, prevalece la confianza, consolídase el crédito, florecen las industrias, surgen nuevas empresas y resulta un período de desarrollo general, que induce a la especulación. El

público especulador invade el distrito financiero de Wall Street y aumenta el volumen de las transacciones, porque las nuevas empresas encuentran compradores ávidos, hasta que la balanza de la estabilidad se inclina por hacerse excesiva la especulación y resultan los males consiguientes. En situaciones financieras anormales de esta especie, suele acontecer algo inesperado, en la forma de una calamidad pública, local o privada. Aféctase entonces el mercado en momentos en que están comprometidos sus recursos monetarios normales, mucho más allá del límite de lo que puede hacer frente y estalla una crisis económica, la cual da por resultado la cesación del crédito, escasez primero y desaparción en seguida del medio circulante metálico y fiduciario. Los bancos disminuyen sus préstamos, comienzan las liquidaciones forzosas, siguen las quiebras de todo género, los clearing-houses emiten pagarés certificados a las instituciones perfectamente solventes y se acentúa el malestar general.

Semejante estado de depresión financiera es seguido casi siempre de un período de estancamiento y apatía, del cual se levanta el país lentamente y resurge Wall Street con su muchedumbre de especuladores, que se esfuerzan ávidamente de aprovecharse de otra etapa de bonanza comercial y financiera.

Las épocas de prosperidad reconocen por causa, entre otros y muy diversos motivos, un prolongado lapso de tiempo de juego de Bolsa, con buen éxito, al alza de cotizaciones bursátiles; abundancia de producción agrícola; facilidades de trasporte para la distribución de esos productos; actividad comercial y normalidad política interna é internacional.

Se ha propuesto el suscrito, con la somerísima exposición que antecede, esbozar como funciona el complicado mercado financiero de los Estados Unidos y concrétase ahora a la época presente.

Aunque los Estados Unidos han observado la máxima que estableció Jorge Wáshington de no contraer alianzas políticas comprometedoras, sin embargo sus vastas relaciones comerciales los han convertido en partícipes de los negocios de otros países.

Cuando estalló la guerra actual, la clausura de las Bolsas en los Estados Unidos y la ley de espera en la Gran Bretaña y otros países europeos produjeron el efecto de paliativos a la súbita suspensión del tráfico internacional. Se estancó la exportación de los productos de los Estados Unidos y los tenedores de bonos de este país en Europa trataron de convertir en numerario estas acciones de deuda pública, que poseían y montaban a varios billones de dólares. Era Inglaterra en ese crítico momento el acreedor del mundo y demandó el pago de sus créditos individuales, a corto plazo, montantes a unos cien mil millones de dólares, los cuales no podían liquidarse por medio de remesas de mercaderías y las deudas británicas contraídas en el extranjero estaban escudadas por la ley de espera. Le ha sido inculpado a los Estados Unidos el haberse colocado en una posición económica tan peligrosa, por no haber tenido reorganizado, a tiempo, su sistema financiero. Peligros mucho menores dieron por resultado, en 1893, gran número de quiebras, suspensiones de pago y la desaparición de muchas casas bancarias, mercantiles e industriales. El Ministro de Hacienda de los Estados Unidos hizo frente a la crisis de 1914, por medio de la distribución equitativa a los Bancos Nacionales de 160 millones de dólares, en numerario, bajo determinadas condiciones.

El estado actual de las finanzas y de la solvencia de los Estados Unidos puede resumirse así: Hasta el año de 1914 había 7,500 Bancos Nacionales en los Estados Unidos, con un poder bancario de nueve billones de dólares. Existían 20,000 Bancos de Estado, compañías de *trust*, etc., con un poder bancario de catorce billones de dólares. La riqueza nacional del país pasa de doscientos mil millones de dólares. Esta riqueza, por unidad de población es de cerca de

dos mil dólares. El per cápita de la deuda pública es de $46, y el de la circulación monetaria es de $34.50. La balanza neta de comercio en favor de los Estados Unidos durante los últimos años ha sido por término medio, de 300 millones de dólares al año. Pero los Estados Unidos han tenido estancados estos recursos porque su legislación restringía que pudieran hacer frente a su comercio extranjero por lo que dependían principalmente del apoyo que a este fin recibían de Londres.

Sabido es que la estructura financiera de un país consiste (1) de los créditos a largo plazo o sean las obligaciones contraídas por gobiernos, municipalidades o corporaciones, cuyos créditos se basan en las Bolsas de bonos; (2) de los créditos a corto plazo o sean obligaciones individuales, que cuentan con el mercado de descuento y los bancos de depósito, y (3) de los Bancos que emiten billetes.

Los Estados Unidos se apercibieron de la necesidad de darle elasticidad a su mercado financiero, cuando sufrieron las consecuencias de la crisis que produjo la guerra europea actual y decretaron una nueva ley bancaria y de circulación, que dispone el establecimiento de Bancos de Reservas Federales para hacer frente a las contingencias de aumento y disminución en los negocios y tiene la mira especial de fundar sucursales de los Bancos Nacionales de los Estados Unidos en países extranjeros. Según el nuevo decreto están divididos los Estados Unidos en 12 distritos, contando cada distrito con 500 a 700 Bancos Nacionales que se unen para formar un nuevo instituto denominado Banco de Reservas Federales al cual contribuye cada Banco Nacional con el 6% de sus acciones de capital enterado en caja y un excedente para cubrir el capital necesario. El capital de estos 12 Bancos de Reservas Federales es de cien millones de dólares. La mitad del capital está enterado en caja; pero como cada Banco Nacional tiene que enterar en su Banco Federal de Reservas cierta parte de su excedente legal, se dispone ya en los Estados Unidos de unos 300 millones de dólares como fondo de Reservas Federales y dentro de poco se dispondrá de 400 millones de dólares a este fín. Las acciones devengan un dividendo acumulado de 6% anual y la mitad de las ganancias netas de estos 12 Bancos de Reservas Federales, puede ser pagado como fondo excedente hasta cubrir el 40% del capital en acciones enterado en caja. Todas las ganancias netas que pasan de este dividendo y excedente le corresponden a los Estados Unidos como impuesto de franquicia. Ha sido creada también una Junta Federal de Consejo para convenir con la Federal de Reservas lo concerniente a ratas de descuento, aceptación de pagarés, etc.

El decreto de Reservas Federales autoriza, por primera vez, la aceptación de giros relativos al comercio de importación y de exportación de los Estados Unidos y los pone por tanto en capacidad de conceder créditos a la América Latina, en algunas de las capitales de cuyos países han comenzado ya a establecerse sucursales de los Bancos Federales de Reserva de los Estados Unidos. El National City Bank de Nueva York ha formado una compañía financiera con un capital de 50 millones de dólares para proporcionar los medios financieros que necesitan los países latino americanos para fomentar sus riquezas naturales y promediar el desarrollo de sus relaciones comerciales con los Estados Unidos.

Está el suscrito completamente de acuerdo con los que sostienen que no es conveniente, que un país dependa de un solo mercado para sus finanzas ó sea para sus obligaciones de crédito a corto y a largo plazo. Debe tener, al contrario, dividido el riesgo de su independencia financiera tan por iguales partes cuanto sea posible en los países con los cuales cultiva relaciones comerciales, por ser evidente que una nación debilita su poder financiero cuando está

demasiado sometida a un solo mercado, por ventajosas que sean las condiciones en que coloca sus obligaciones allí, pues puede acontecer que esos bonos, al vencerse en un momento de crisis monetaria, coloquen al país deudor en una situación precaria, si no tiene disponible otro mercado donde proveerse, sin demora, de los medios indispensables a fin de hacer frente a desembolsos imperiosos. Este principio fué postulado por cuanto se refiere a los Estados Unidos, en el reciente Congreso Financiero y es aplicable á cualquiera nación. Por este y otros motivos cada país, ya sean los Estados Unidos o las Repúblicas latinoamericanas, debe estar preparado para hacerle frente a esta clase de emergencia, de la manera más previsora.

Europa ha contribuído eficazmente al desarrollo de todo el Hemisferio Occidental; pero actualmente la contienda armada tiene embargada su potencialidad. Al cesar la guerra tendrá la América Latina que volver a proveerse de los artículos que acostumbraba adquirir allí, si los manufactureros y comerciantes de los Estados Unidos no se dan cuenta exacta de la imperiosa necesidad en que se encuentran de adaptar perfectamente sus productos manufacturados u otros artículos que ofrecen a la venta, a las necesidades, gustos y condiciones que requieren los mercados latino americanos y conceden idénticas facilidades de pagos individuales, al mayor plazo que sea posible, conforme al crédito que merezca el respectivo comprador y promediar la colocación de empréstitos de Gobiernos, municipalidades ó corporaciones, en condiciones aún más equitativas que las que pudieran obtenerse en Europa si estuvieran abiertos sus mercados financieros.

Los espíritus dirigentes en los Estados Unidos deberían tratar de inculcar en el ánimo de sus compatriotas la manera de adaptarse a las circunstancias, sin pérdida de tiempo, para que logren buena acogida para las mercaderías que desean introducir en los mercados latino americanos y de esta manera conseguirán los Estados Unidos mucho mayor participación en el volumen de las transacciones comerciales y financieras de la América Latina, que el pequeño porcentaje con el cual figura actualmente en las estadísticas.

Los Congresos de Naciones americanas no darán resultados prácticos inmediatos, hasta que los comerciantes y manufactureros de los Estados Unidos no se decidan a amoldarse, por completo, a las condiciones de los mercados de la América Latina y se conviertan en competidores aventajados de los productos europeos en dichos mercados, pues queda demostrado que los Estados Unidos, como Gobierno, ya han ensanchado lo suficiente el radio de acción de sus finanzas y se encuentran hoy dispuestos y en capacidad de acrecentar en grande escala sus relaciones financieras y mercantiles en toda la América Latina.

SEGUNDA PARTE.

La Hacienda de los Estados Unidos de Venezuela es el conjunto de los bienes, rentas, contribuciones, derechos y acciones pertenecientes al Gobierno de la Unión.

Los datos más importantes que dan a conocer la Hacienda Nacional, se centralizan en la Contaduría General donde se archivan e inscriben en el "Gran Libro de la Hacienda Nacional."

Son fuentes de renta nacional, (1) todos los productos de los bienes y servicios nacionales, (2) el producto de los derechos de importación de mercancías extranjeras y otros que se cobran en las aduanas, (3) el producto de las otras contribuciones nacionales establecidas o que se establezcan por las leyes, (4) el producto de ingresos varios, (5) las deudas ordinarias recaudables a favor del Tesoro, (6) el producto de la administración de las minas, salinas y terrenos baldíos cedidos por los Estados de la Unión, según la Constitutión.

Los derechos de aduana consisten de los derechos de importación, almacenaje, intereses y multas.

El Tesoro Nacional se compone del producto líquido de las rentas que entran en las arcas de las Tesorerías Nacionales.

La Ley de Presupuesto se divide en dos partes. La primera se denomina Presupuesto de Rentas y la segunda Presupuesto de Gastos.

El origen de la deuda interna de Venezuela data de 1826. Existían entonces diferentes especies de deuda interna y Venezuela era una de las tres repúblicas que constituían la Gran Colombia. En 1831, cuando Venezuela se convirtió en nación independiente autónoma, la deuda flotante que existía fué convertida en deuda consolidada.

Por el tratado celebrado en 1845 entre Venezuela y España el valor de la propiedad perteneciente a los súbditos españoles que fué confiscada por el Gobierno de la República, se convirtió en deuda consolidada.

La historia sinóptica de la deuda exterior de Venezuela es la siguiente: En 1820, cuando se contrajeron las primeras obligaciones extranjeras, Venezuela y el Ecuador formaban parte de Colombia. En 1831 dividióse Colombia en tres repúblicas que se llamaron Nueva Granada, Ecuador y Venezuela. Se celebró una Convención en 1834 según la cual la deuda de la antigua República de Colombia se adjudicó entre las tres repúblicas, de la manera siguiente: Nueva Granada, 50%; Ecuador, 21½%; Venezuela, 28½%.

El 31 de diciembre de 1901 la deuda pública de Venezuela ascendía, en números redondos, a 38 millones de dólares, de los cuales 24 millones correspondían a la deuda exterior y 14 millones a la interna.

El resumen de las deudas interna y exterior de Venezuela en 1914 es el siguiente:

El 30 de junio de dicho año montaba la deuda interna de Venezuela, en números redondos, a 11 millones de dólares y la exterior a 22 millones, por lo tanto, el total de ambas deudas ascendía a 33 millones de dólares y esto equivale a unos 11 dólares por unidad de población.

Todas las casas de importación establecidas en Venezuela, efectúan operaciones de banco con el interior de la República y con países extranjeros; pero la mayor parte de estas transacciones se verifican por medio de tres instituciones, a saber: El Banco de Venezuela, el Banco de Caracas y el Banco de Maracaibo.

En lo que se relaciona con el medio circulante, todo valor en Venezuela se basa y calcula en oro. Las monedas de oro de otras naciones, desde 1871, tienen circulación autorizada a un precio fijo e inalterable.

Las monedas de plata de cualquier país extranjero son de prohibida circulación desde 1876; pero las de Venezuela están hoy y han estado siempre a la par del oro y se aceptan como parte de los pagos de contribuciones y de transacciones públicas y privadas, sin la menor pérdida o depreciación en su valor. Se debe esta paridad al hecho de que ni actualmente ni jamás en lo pasado se ha acuñado plata y puéstola en circulación en Venezuela en cantidad que excediera a su demanda como medio circulante o a la capacidad del Gobierno de redimirla a la par, en oro.

El único papel moneda que está en circulación son los billetes de banco emitidos actualmente por los bancos de Venezuela, Caracas, y Maracaibo. Está limitada la emisión de billetes de banco y perfectamente garantizada.

El sistema monetario de Venezuela se basa absolutamente en el oro. La moneda nacional de plata y los billetes de banco se cambian a la par del oro y no ha circulado jamás ni circula hoy medio circulante fiduciario de ninguna especie que esté despreciado. Por lo tanto el sistema monetario basado en el

oro, en Venezuela, no es ni nominal ni ficticio, sino perfectamente sólido. Esta circunstancia coloca a Venezuela en una situación excepcional, en este particular, con relación a las demás repúblicas latinoamericanas.

El Congreso de Venezuela tiene la atribución de fijar el tipo, valor, ley, peso y acuñación de la moneda nacional.

Ni el poder legislativo ni ninguna otra autoridad de la república, podrá en ningún caso ni por ningún motivo emitir papel moneda, ni declarar de circulación forzosa billetes de banco, ni valor alguno representado en papel, ni permitir que se importe en Venezuela ningún medio circulante extranjero o nacional sino las monedas de oro.

El Departamento de Finanzas está dividido en tres secciones principales, a saber: Administración, Tesoro y Contabilidad.

Las tres cuartas partes de la renta nacional está constituida por la renta aduanera que deriva sus entradas de los derechos que percibe de las mercaderías que se importan en el territorio de la República.

Actualmente se está dedicando preferente atención a la reorganización de la renta nacional. Debido a la ventajosa posición geográfica que ocupa Venezuela en el vértice del Continente Meridional de este hemisferio y al hecho de poseer vastas riquezas materiales que encuentran mercado fácil para su exportación y a ser país importador de considerable cantidad de mercaderías extranjeras, la Administración Pública actual de Venezuela y especialmente el Departamento de Finanzas, estudia detenidamente el establecimiento de uno o más puertos libres en la costa de Venezuela, donde se construirán almacenes de depósito adecuados para contener mercancías conforme al sistema de los "warrants." Pronto quedará incluso en nuestra legislación aduanera el de los "drawbacks."

Refiriéndome al tanto por ciento, al cual aludí en la primera parte de esta disertación, de la participación de los Estados Unidos en el volumen total del comercio panamericano, las estadísticas demuestran que en el caso particular de Venezuela los Estados Unidos sólo participan en un 32%. Por lo tanto lo que expuse sobre la manera de que pueden aumentar este porcentaje también se refiere a mi país y si los manufactureros y comerciantes de los Estados Unidos adoptan medidas como las que esbocé en dicha primera parte, ellas serían mutuamente ventajosas.

Igualmente lo expuesto en lo tocante a asuntos de orden financiero se relaciona especialmente a tratar de fomentar las relaciones de finanzas entre los Estados Unidos de Venezuela y los Estados Unidos de América cuya organización y funciones de unos y otros me propuse esbozar a fin de contribuir a que sean más estrechos sus lazos mercantiles y financieros.

The CHAIRMAN. Before the chair calls upon the next speaker he would like to make an announcement. It has been decided by the executive committee of this congress that all resolutions submitted by individuals should come, so far as possible, through the sections. We already have had one resolution perfected according to the arrangements made last week, the resolution looking toward uniformity of port dues and regulations. There are three other resolutions which have been presented and which have been referred to the same committee of which Mr. Casasus is chairman, and which will be presented later. Those three resolutions embrace, first, one looking toward a possible uniformity of banking and currency regulations; second, a resolution looking toward a possible uniformity of statis-

tics, more especially population and commercial statistics in all countries of the union; and, third, a resolution looking toward the establishment of better means of communication between the United States of America and the Central and South American Republics. If any member of this section has any other resolution which he thinks of importance, I should be very glad to have him frame such a resolution for submission to the proper committee at this afternoon's session.

The present chairman is unfortunately required to attend a meeting of the executive committee of this congress now, and he therefore takes great pleasure in turning over the chair and relinquishing the chairmanship of this morning's meeting to Prof. David Kinley, dean of the Graduate School, University of Illinois.

Thereupon Prof. David Kinley took the chair.

The CHAIRMAN (Prof. KINLEY). The next paper on our program will be on "The best methods to facilitate commercial transactions between manufacturers of the United States and Spanish-American merchants." This paper has been written by Señor Dr. Lorenzo Anadón, of Argentina, and will be read by Señor Dr. Juan B. Ambrosetti, of Argentina, whom I have the pleasure of presenting to you.

PROCEDIMIENTOS MÁS INDICADOS PARA FACILITAR LAS TRANSACCIONES COMERCIALES ENTRE LOS MANUFACTUREROS DE ESTADOS UNIDOS Y LOS COMERCIANTES HISPANO-AMERICANOS.

Por LORENZO ANADÓN,
Ex-Ministro de Argentina en Chile.

I.

Desde que en 1889 se reunió la primera Conferencia Pan Americana en Wáshington, viene siendo objeto de verdadera preocupación el estudio de los medios más adecuados para desarrollar el intercambio comercial entre las naciones del centro y sud de América con los Estados Unidos. Reformas aduaneras, aumento de los medios de transporte, fundación de establecimientos bancarios, son, entre otros, los expedientes que se han aconsejado para facilitar la expansión del comercio norteamericano en los mercados del mediodía.

Interesados los estadistas de la gran República en fomentar el panamericanismo, era natural que atendiesen, de preferencia, al desenvolvimiento de las transacciones con el sud del continente, hasta por el deseo de substraer la economía y la actividad de estos países a la influencia decisiva del Viejo Mundo. Abundando en el mismo propósito los gobernantes hispano-americanos, se han presentado, también, extensos y eruditos trabajos acerca del intercambio, en las conferencias posteriores de México, de Rio de Janeiro y de Buenos Aires; se ha discutido asimismo el punto en otros congresos panamericanos, votándose numerosos acuerdos y resoluciones que han puesto reiteradamente de relieve cuán generalizada está la idea de estrechar más y más nuestras comunes relaciones.

No es posible desconocer, empero, que aun dista mucho de ser apreciable el resultado de las iniciativas y proyectos surgidos en los últimos veinticinco años, con el concurso resuelto de pueblos y gobiernos. Procuremos, pues, analizar el problema bajo un punto de vista práctico, ya que la experiencia adquirida manifiesta la poca eficacia de los discursos y las disquisiciones doctrinarias en esta materia.

Es opinión muy difundida en los Estados Unidos la de que una de las principales razones por qué los exportadores europeos han dominado el comercio internacional con Centro y Sud América, ha sido por sus métodos liberales de venta, en cuanto al monto de los créditos y a la amplitud de los plazos. En la época reciente han manifestado este mismo concepto del problema las diversas comisiones de agentes comerciales norteamericanos que nos han visitado, porque la guerra europea, con su influencia mundial en todos los sentidos, ha hecho surgir, en pocos meses, un nuevo movimiento de viajes y de estudios que nos llevará, sin duda, a soluciones inmediatas.

No puede ser mayor la urgencia de investigar los motivos del retraimiento que se observa en los mercados meridionales para los productos de Norte América. Si se exceptúa la maquinaria agrícola, petróleo, ciertos vehículos y muebles, maderas de construcción y otros artículos propios de los Estados Unidos, los consumidores del sud han continuado prefiriendo la manufactura de Francia, Inglaterra o Alemania. Pero esta preferencia va perdiendo su aplicación en el presente, pues se diría que el enorme conflicto, mayor y más sangriento cada día, ya no sólo amenaza arruinar la industria y el comercio de los beligerantes, sino su misma civilización por toda una serie de años.

Los hijos de América tendremos, de consiguiente, que bastarnos a nosotros mismos, activar nuestras comunicaciones y restablecer, por medio del más rápido progreso—fundado en el trabajo y en la paz,—el buen concepto que está perdiendo la familia humana.

II.

El comercio de importación europea en la Argentina, sólo por excepción se ha constituído sobre la base de los créditos a largo plazo. El fabricante del Viejo Mundo vendía allá a las casas bancarias o financieras, al contado o a plazos muy cortos, porque se trataba, principalmente, de adquirir el artículo al mínimum posible de precio. Desde hace treinta años o más, aquellas casas de banca europea remitían mercaderías a nuestros importadores—que por lo común eran habilitados suyos—acordándoles plazos prudenciales. Los importadores negociaban, a su vez, con los mayoristas y éstos con los minoristas, manteniéndose la clientela de cada ramo y su control, con plazos cómodos que se acordaban respectivamente unos a otros.

Con posterioridad, y sobre todo en materia de tejidos, las grandes casas de ultramar comenzaron a entenderse con los mayoristas, y los importadores con los minoristas. Más tarde las casas europeas vendieron directamente a mayoristas y minoristas, por medio de viajantes de comercio. Esta competencia muy activa trajo una lucha de precios y de plazos, con perjuicio de todos y particularmente de los europeos que no habían tomado las debidas precauciones para garantizar sus créditos. A consecuencia de esta lucha, se introdujo en el comercio de tejidos el sistema de conceder hasta un año de plazo, con valor a 7 meses: el vendedor entregaba la mercadería sin recibir los documentos, durante siete meses. Vencido este plazo, el comprador podía descontar o subscribir pagarés, o dejar de hacerlo.

Durante la crisis actual, como en la de 1890 a 1893, el alto comercio europeo y el del país sufrieron grandes pérdidas, en parte por los plazos, pero, sobre todo, por cesación de pagos de sus deudores. Corresponde exceptuar en estos

quebrantos a las casas importadoras que, salvo casos aislados, cumplieron siempre con regularidad sus compromisos. Las relaciones sostenidas por estas casas con Europa se han distinguido siempre por la corrección y la buena fe en el envío de los mismos artículos ofrecidos en muestra, como por la fidelidad de los clientes y el pago oportuno de las obligaciones. Debe advertirse aún que, en general, las casas bancarias exportadoras que trafican con los mayoristas y minoristas, no son las mismas que lo hacen con los importadores.

Por lo demás, el abuso de los plazos y la falta de documentación como norma establecida, produjeron un verdadero desconcierto, en el comercio de tejidos y ramos de ropería y de mercería. Para ponerle término, los principales interesados en la importación de tejidos y ramos afines, celebraron un convenio sobre ventas a plazo que fué subscrito en julio de 1914. Este convenio se cumple estrictamente y ha restablecido por completo el orden y seriedad de los negocios. Resta manifestar, por último, que la lucha de plazos ha sido sólo en los tejidos, porque los demás ramos, comestibles y bebidas, maquinaria, droguería, etc., han tenido siempre la venta con plazo máximo de seis meses, mediante pagaré.

III.

El señor Harry Morton que con otros delegados norteamericanos, llegó a Buenos Aires en marzo del corriente año, fué oído en sesión especial por la Cámara Sindical de Comercio. Discutióse extensamente allí el mismo tema de que estoy ocupándome y el señor Morton insinuó la conveniencia de que el comercio sudamericano mandase a Estados Unidos agentes y representantes, conocedores del idioma y de las costumbres, para que estimularan el desarrollo de las vinculaciones interamericanas. Es digno de observarse que aunque este problema haya seguido debatiéndose, por los gremios interesados y en la prensa periódica, nadie ha recogido la idea de acreditarse delegados a Norte América por el comercio sudamericano. Tampoco se mandaron jamás a Europa, a pesar de la facilidad de las comunicaciones y la tendencia característica en estos países a emprender viajes con aquel destino. Y la razón es obvia. Se comprende bien que las naciones fabriles procuren mercados para la colocación de sus productos, ante la concurrencia general y la necesidad de exhibir lo que fabrican, así como las ventajas de su uso; pero no es fácil explicarse la utilidad que encontrarían los consumidores de esos mismos productos en el empeño de recorrer el mundo a la pesca del vendedor.

Los europeos comprendieron desde temprano que estaba en su interés atraerse la clientela de los pueblos nuevos. Aun antes de haberse conquistado la independencia hispano-americana, ya Inglaterra buscó en estas regiones una salida para sus manufacturas y más tarde un campo de aplicación para sus empresas industriales. Así en el Río de la Plata y el Brasil, lo mismo que en Chile y el Perú, fueron inglesas las primeras casas de comercio europeo, establecidas allá por el año de 1830. Los puertos británicos recibieron asimismo las más antiguas exportaciones de Sud América, y este tráfico siguió desarrollándose, por un largo período, con resultados recíprocamente ventajosos. Entiendo además que fué aquí donde el capital inglés dió las primeras muestras de ese espíritu emprendedor, que ha revelado luego en todas partes, hasta hacer al mundo tributario del Stock-Exchange. Por lo menos, ya en 1825 pudo colocarse en esa Bolsa un empréstito argentino por un millón de libras, contratado en condiciones bastante liberales para la época. Posteriormente, y se puede afirmar que hasta fines del siglo anterior, todas las compañías de navegación, ferrocarriles, puertos y demás obras públicas de estos países, se debieron exclusivamente a los ingleses. La Argentina ha sido a este respecto la república predilecta, tanto por la importancia de los capitales invertidos, que ahora llegan a cuatrocientos ochenta

millones de libras esterlinas, como por la constante buena voluntad con que fueron ofrecidos. Es de justicia hacer constar que ni las mayores crisis económicas argentinas, ni las dificultades políticas más graves han hecho perder al pueblo inglés su confianza absoluta en el porvenir de la República. Si fuera necesario comprobarlo, bastaría una estadística sumaria de las empresas que desde hace más de cincuenta años vienen organizándose, por el capital inglés, con el objeto de construir vías férreas u obras portuarias, adquirir tierras, formar sociedades ganaderas, agrícolas y comerciales, dentro del territorio argentino.

Por su parte Alemania, que sólo llegó a la América española después de todos sus competidores, supo ganarse un puesto preferente en pocos años, merced a su energía y su actividad. Fueron dos los medios que empleara principalmente, para alcanzar su gran situación antes de la guerra: la marina mercante y los agentes de comercio. Los buques alemanes aparecieron en estas costas 20 años atrás, próximamente, haciéndose notables, desde luego, por la superioridad de sus servicios. Mayor velocidad, instalaciones más modernas, personal elegido—que dominaba el castellano—fueron, entre otras, las ventajas de estos vapores para los viajes transatlánticos. Como se hallaban también mejor dispuestos para el transporte de carga y atendían todos los reclamos justificados, el comercio de importación y exportación los prefería, de manera que en la última época, una parte considerable del tráfico exterior argentino buscaba esa bandera. Otra causa del desarrollo que iban tomando los negocios de Alemania en Sud América, era la propaganda de los viajantes de comercio. Con el espíritu de perseverancia y disciplina que son innatos en la raza, el agente alemán excede pronto a sus rivales por la amplitud de los conocimientos y la cumplida información que adquiere sobre los usos y costumbres de cada población consumidora. Con estos auxiliares, la manufactura germana tiende al desalojo inmediato de los contrarios, y lo consigue en breve, por su adaptación a los gustos locales y la imitación de las marcas acreditadas. Es claro que todo se subordina así a la difusión de un artículo más barato, pero que necesariamente es inferior. Una competencia larga y obstinada entre productos similares por la clase, hubiera estado más en relación con el mérito real de los agentes alemanes.

Otras naciones europeas, Francia, Italia, Bélgica, Países Bajos, España, enumeradas por su colocación en la estadística argentina, mantuvieron activas relaciones comerciales con estos países, desde la primera hora. Francia, Italia y España siguieron además a Inglaterra en el establecimiento de empresas de navegación hasta Buenos Aires, las que han formado vinculaciones de todo género entre los pueblos respectivos. No puede olvidarse, sin embargo, que el concurso europeo más eficiente ha sido el de la inmigración, que durante los años transcurridos de 1857 a 1913 representa, en cifras redondas, 2,200,000 italianos y 1,400,000 españoles, incorporados a la población de la República Argentina.

IV.

Aunque de los parágrafos anteriores ya es fácil deducir por qué procedimientos pueden los exportadores norteamericanos alcanzar la situación de los europeos en los mercados de Sud América, es conveniente precisar más la cuestión, refiriéndola, sobre todo, a los obstáculos que hasta ahora han impedido el desarrollo de las relaciones comerciales interamericanas.

Desde luego, importa repetir que los créditos a largo plazo, acordados sólo por excepción, están muy lejos de explicar la expansión industrial y mercantil a que había llegado el Viejo Mundo. Queda expuesto anteriormente lo que tiene de errónea la opinión sobre esos créditos, pudiendo agregarse que mien-

tras no se establezcan vinculaciones más directas, los mejores intermediarios, entre el manufacturero del exterior y este comercio, son las casas importadoras dignas de confianza. Ya hay algunos casos de contratos americano-argentinos en ejecución, que acreditan la eficacia y seguridad del procedimiento. En cambio, el sistema de emplear comisionistas para las transacciones, debe ser abandonado en absoluto. Estos agentes que sólo tienen interés en la operación inmediata a realizar, son los enemigos del verdadero tráfico y están ahora conspirando contra su establecimiento. En cuanto a la práctica de vender exigiendo el pago anticipado a contra documentos, por intermedio de los bancos, tiene que ser necesariamente transitoria. El gran comercio interamericano no puede constituirse sin el crédito, que es en los países nuevos el principal instrumento de los cambios. Esta verdad, comprendida desde luego por los exportadores europeos, se impone con evidencia nueva en el presente. La Argentina, que era hasta hace treinta años un país casi exclusivamente ganadero, va en camino de ser uno de los primeros productores de cereales y otros frutos agrícolas, como lo demuestran estas cifras:

	Pesos oro de 48.	
	1885	1913
Exportación ganadera	61,182,000	105,358,000
Exportación agrícola	11,342,000	307,520,000

Dará una idea más completa de las perspectivas que ofrece la agricultura argentina, el hecho de que en el período de dieciocho años, las hectáreas sembradas, que eran 5,570,000 en 1896 subieron a 24,091,000 en 1913. Si se considera todavía que sin perjuicio de la ganadería y las demás industrias, puede llegar a doscientos millones de hectáreas la extensión sembrada en el territorio nacional, se comprende fácilmente qué proporciones tomará la exportación agrícola argentina. Pero esta producción, que es anual, no iría a buscar en el tráfico panamericano los cuantiosos elementos de importación que necesita, sobre la base de los pagos al contado. Nuestra agricultura, y todo el país con ella, acudirían por fuerza a los mercados donde pudieran comprar en las condiciones liberales que hicieron surgir aquella industria hace treinta años, fomentándola después hasta llevarla a su actual prosperidad.

No sería completa esta reseña si se omitiera la mención de las deficiencias que este comercio encuentra en la exportación norteamericana. Se enuncian, pues, rápidamente a continuación:

(*a*) Obsérvase, ante todo, que el artículo de aquella procedencia no se acomoda absolutamente a los hábitos locales. Es natural que el manufacturero de Estados Unidos tenga dificultad para adaptarse a los deseos de un público que difiere por completo del propio. Pero asimismo, esta es una exigencia indispensable del buen éxito y sólo por haberla seguido estrictamente, han podido los alemanes prevalecer contra sus grandes adversarios.

(*b*) La cuestión del precio tiene también una importancia capital. Prescindiendo de algunas excepciones, la mercadería americana pasa aquí por ser más cara que la de otras procedencias, y esto aún para ciertos productos que constituyen un monopolio del vendedor. Este cargo resulta difícil de admitir a quien haya visto cómo es de general en los Estados Unidos la costumbre de conceder rebajas de 30 y de 40%, hasta para la venta al por menor, en todo artículo destinado a la exportación. Allí pueden hacerse estos descuentos sin

perjuicio del fabricante norteamericano, que para indemnizarse de cualquier quebranto, no necesita salir de las fronteras nacionales, contando con el más rico y vasto mercado consumidor que haya en el mundo.

(c) Aunque ya se ha insinuado más arriba la inconveniencia de consignar a comisionistas las mercaderías procedentes de Norte América, vale la pena de insistir al respecto. El que esto escribe ha recogido, en los centros comerciales de Buenos Aires, la impresión más general acerca de que los comisionistas están desacreditando el intercambio panamericano, por los abusos que cometen.

V.

Antes de poner término a este ya largo informe, conviene referirse por un momento a la población. El manufacturero inglés, español, francés o italiano, fué precedido en la Argentina por grandes colectividades del mismo origen, residentes de muchos años, unidos en gran número con familias nativas y cuyas fortunas acrecentadas permitieron, al fin, la fundación de bancos, que a pesar de su nombre extranjero, se han formado con capitales del país. Estas avanzadas de pobladores animosos constituyen los mejores agentes comerciales conocidos. Son ellos quienes suministran al exportador datos exactos y le señalan cuáles son los artículos que el público desea; son ellos también quienes llevan los primeros depósitos al Banco de la colectividad y las referencias más seguras para que elija su clientela.

El pueblo norteamericano, que es tal vez el único dotado de todos los elementos para bastarse a sí mismo, no había sentido aún la necesidad de buscar aplicación exterior a su progreso. Pero la enorme acumulación de la requeza nacional y el desenvolvimiento extraordinario de una industria que bajo ciertos aspectos provee al mundo—está impeliendo la actividad norteamericana hacia la competencia universal. La comprobación de que este es un rumbo definitivo, ha de consistir, probablemente, en una tendencia emigratoria que irá ensanchándose a medida que el tráfico internacional sea más intenso. Así ha ocurrido, al menos, en las relaciones de Europa con América, porque si el factor económico no determina siempre las emigraciones humanas, tiene sobre ellas influencia manifiesta. Si no ha pasado lo mismo entre Estados Unidos y Argentina, a pesar de que aquel país sólo viene después de Inglaterra y Alemania, en el tráfico internacional argentino, se debe acaso a una razón particular. La importación norteamericana a este mercado llega al 70% con respecto a la exportación para aquel destino y se compone, en su mayor parte, de artículos sobre los cuales la concurrencia europea no puede ejercitarse. Ahora bien, donde la lucha comercial no existe, la corriente humana sigue difícilmente a la económica.

Pero en las presentes circunstancias, cuando nuestros proveedores han desertado el campo, la gran República puede y debe empuñar los instrumentos de trabajo que Europa dejó caer de sus manos combatientes. La exportación americana está, pues, llamada a colmar aquí muchos vacíos, satisfaciendo necesidades nuevas para su industria en los mercados meridionales. Es de esperar que esto suscite una afluencia de población norteamericana que, por su parte, el pueblo argentino acogería con verdadera complacencia. Si esta presunción se realizara, ¡cuántos frutos copiosos no había de producir el contacto de los pueblos más ricos del Continente, en estos días trágicos, en que es América la mayor esperanza de la salud futura!

The CHAIRMAN. The next paper of the morning, transferred from the order according to the necessities of the program, will be by Prof. Robert M. Haig, of Columbia University, New York, on the subject,

"The American system of special assessments and its applicability in other countries."

THE AMERICAN SYSTEM OF SPECIAL ASSESSMENTS AND ITS APPLICABILITY TO OTHER COUNTRIES.

By ROBERT MURRAY HAIG.

A study of the history of American finance is an exercise which is not conducive to complacency and self-satisfaction. The record on the whole is not brilliant. In fact, there are but few pages which justify even a measure of pride; but, after the manner of those who have not many things of which to be proud, there is perhaps a tendency to be exceedingly proud of those parts of the system which are creditable. There is, however, one financial device which on the whole is worthy of the high praise which it has received. This is the system of paying for local improvements by levies upon the land especially benefited, technically known as special assessments. Here is a plan which has proved its right to the consideration of students of finance everywhere.

SPECIAL ASSESSMENTS IN RELATION TO THE LAND POLICY.

Although the opportunity once existed in the United States for a huge experiment with Government ownership of land, that time has now long passed. Title to the great stretches of territory west of the Alleghanies once rested with the Federal Government. The city of New York in 1686 was made the owner of practically all of the uninhabited land on Manhattan Island.[1] When the city of Washington was laid out every alternate lot was turned over to trustees and sold for the benefit of the public treasury.[2] To-day these public holdings have practically disappeared. The direct financial returns from the sale of the national domain were, of course, inadequate, but they were consciously sacrificed for the sake of indirect effects, particularly the rapid development of the country. The lots in the city of Washington had been almost entirely sold to private individuals by 1820, and those in the city of New York by 1866.[3] In New York an attempt was made to profit directly, for in 1796 the policy was adopted of selling alternate lots, the unsold portions being held for 50 years to enable the city to benefit by the rise in land values.[4] There are some other instances also of substantial direct public benefit from land-value increases. It was, for example, the regular rule in Illinois to auction off the county seat to that town which would offer the largest amount of land to be sold for the benefit of the county treasury. Even the State capital was located and relocated on this principle. But, after all, whether the returns were adequate or inadequate, the fact remains that the land formerly held in such large amounts by the public has been allowed to pass into private hands and that the enormous increases in values have accrued to the immediate benefit of private individuals.

These values, moreover, have not been seriously disturbed by taxation. Of course it is true that with the breakdown of the general property tax real estate in general has been called upon to carry a large share of the burden, but that burden thus far has not been onerous; and, in addition, buildings have

[1] Black, Municipal Ownership of Land on Manhattan Island, p. 17.

[2] Brief on behalf of the Joint Citizens' Committee of the District of Columbia, p. 5 et seq.

[3] Ibid., p. 8; Black, op. cit., p. 62.

[4] Ibid., p. 75.

probably been overtaxed as compared with land more often than the reverse. Land has not been singled out for special taxation. Increment taxes in the United States have never reached a stage beyond that of mere discussion. The legal exemption of improvements, which has been carried to such lengths in the Provinces of Canada, is in force in only two cities in the United States.[1] Excess condemnation only recently has been authorized in a few of the States. Indeed, it appears that owners have jealously and successfully guarded their rights to land values against attacks from all directions save one—namely, assessments for local improvements—and doubtless this is explained by the fact that the attack has always been disguised as a method of increasing rather than decreasing the value of their holdings.

ORIGIN AND GROWTH OF THE SPECIAL ASSESSMENT SYSTEM.

Although the United States can not claim to be the country of the origin of special assessments, the manner in which they have flourished here justifies one in saying that this is probably a circumstance attributable only to chance. They are found here almost at the beginning of things, but the evidence is conclusive that the earliest American acts were copied from English statutes of still earlier date.[2] Transplanted though it is, the system has here found an environment more favorable than elsewhere and has reached a state of development far beyond that attained in any other country in the world. In England the use of the special assessment system died out almost completely, and its revival in late years seems to be due, in part at least, to the success of the plan in this country.[3] In France, although the principle is old, little has been accomplished until recently. The system has been used only a short time in Germany and in Belgium, but it is in Belgium that it has reached its greatest development in Europe.[4]

The use of special assessments in this country now has a history stretching over two centuries and a quarter, the first American act authorizing them being passed in 1691 for the city of New York.[5] Through the first century and a quarter the system did not develop to great dimensions, but during the last hundred years it has swept the country. To-day practically every city in the land makes use of it[6] and in a majority of them the receipts from assessments constitute the most productive source of revenue next to the tax on property. Indeed there are instances where they have been even more productive than the property tax.[7] In 1915, the latest year for which the statistics are available, the cities of the United States raised nearly $80,000,000 ($79,890,321) by special assessments—one dollar for every seven raised by property taxes,[7][8] or $2.56 per capita.[9]

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[1] Pittsburgh and Scranton, in the State of Pennsylvania.

[2] Goodnow, Municipal Government, p. 327, cites a case of improvement for paving in Paris in 1609. Seligman states that only 20 to 25 cases of application are known in France, and that they have been traced back to 1672.

[3] Rosewater, Special Assessments, 1898 ed., p. 23.

[4] Seligman, Essays in Taxation, 8th ed., pp. 436, 408.

[5] Rosewater, op. cit., p. 26. There may have been sporadic uses of this method even before this act. (Cf. Proceedings, The Municipal Engineers of New York, 1914, p. 289; Seligman, op. cit., p. 436.) This law followed almost exactly the language of the English statute of 1667, which had been passed to regulate the rebuilding of London after the Great Fire. Ibid., Rosewater, op. cit., p. 24.

[6] Two hundred and one of the 205 cities, according to Financial Statistics of Cities, 1915, p. 166, et seq., received income from special assessments.

[7] E. g., Oklahoma City, Seattle, and Tacoma, in 1909.

[8] Financial Statistics of Cities, 1915, pp. 166–167.

[9] Ibid., p. 160.

OBJECTS FOR WHICH SPECIAL ASSESSMENTS ARE LEVIED.

An examination of the records of some of the cities leaves the impression that they have literally assessed themselves into existence, many of them having paid for practically their entire system of physical improvements by this method. The installation of street improvements, including the opening, widening, grading, and paving of streets and the construction of curbs and sidewalks, is very commonly financed by this system, but it is also frequently used for sewers and for water pipes, for tree planting along the side of the streets, for parks and boulevards. Prospect Park in Brooklyn and Riverside Drive in New York, the park systems of Kansas City and Indianapolis, and the Civic Center in Denver are all monuments to special assessments. The construction of retaining walls, of ditches, embankments, and the dredging of rivers and slips have been financed by this method. At the present time in the city of New York elaborate plans are being prepared which depend upon special assessments to pay for subway construction.[1] They are to be used, also, to contribute toward the cost of constructing an elaborate tunnel street in New York which has recently been completed at a cost of approximately $100,000 to afford access to the subway which at this point is some 200 feet underground. The expenses of repairs to streets and sidewalks and repaving are sometimes met by special assessments, although some of the largest cities do not follow this practice. Street lighting, particularly where the service is unusual or expensive,[2] is often supported by levies of this type. Other services, such as street cleaning, sprinkling, trimming trees, cutting and watering grass in the parked area along streets, garbage collection, snow removal, and even moth extermination, have been and are being furnished in one place or another through charges levied upon the property especially benefited.

THE FISCAL IMPORTANCE OF SPECIAL ASSESSMENTS.

This summary of the purposes for which special assessments are used may indicate even more plainly than statistics the important part they play in the financial affairs of any of our cities, but a few additional figures may not be out of place. In the city of New York, for example, during the last 10 years the assessments confirmed amounted to the enormous sum of $124,000,000 ($123,771,411.06).[3] Portland, Oreg., which in 1910 claimed a population of only 207,214, expended in the 12 years ending 1914 over $30,000,000 ($30,373,374) on street and sewer improvements, all of which was financed by special assessments. Seattle, a city whose population was 237,194 in 1910, has annually collected between $4,000,000 and $5,000,000 in assessments for several years past.[4] Chicago has always made liberal use of special assessments. When first in-

[1] The Utica Avenue extension of the rapid transit system was authorized on the assumption that the land specially benefited would be called upon to contribute toward the cost of construction. A very ambitious project is that which is just now being urged before the Public Service Commission of New York City, and which contemplates the removal of the elevated railway from lower Fulton Street, Brooklyn, and the substitution therefor of a subway to connect Central Brooklyn with the dual subway system. This project involves the expenditure of approximately $5,500,000, of which about $4,500,000 is expected to be furnished through special assessments. The land in this case is to be divided into five zones of benefit, the assessments varying from 20 per cent to three-quarters of 1 per cent of the value.

[2] As, for example, in the case of cluster lights along business streets.

[3] City of New York, Law Dept., Annual Report, 1914, pp. 468, 469, and William C. Ormond, Assessments for Local Improvements, Proceedings, Municipal Engineers of the City of New York, 1914, p. 298.

[4] 1909–1913.

corporated in 1833, power was received to levy assessments for constructing sidewalks,[1] and in 1837 authority was given to use the method for a great variety of objects.[2] The 1837 act was passed seven years before there was a paved street in Chicago, and 13 years before there were any drains except open ditches.[3] The first sewers, built in 1850 at a cost of $2,871.90, were paid for by assessments. During the 50-year period between 1860 and 1910 assessments were confirmed in the city of Chicago to the amount of nearly $185,000,000.[4] Truly, special assessments have played an important part in the history of municipal finance in the United States.

SPECIAL ASSESSMENT PROCEDURE.

The administrative procedure followed in levying special assessments varies considerably from city to city, but the methods used in the city of Seattle are typical and a description of them may be accepted as fairly illustrative of current practice in cities of moderate size.

Assessment projects may legally be initiated either with or without a petition from the property owners affected. In practice the council requires a petition signed by the owners of a majority of the frontage and area affected but then proceeds to ignore it. This is done because experience has shown that fewer difficulties are encountered when the project does not rest for its legal justification upon a petition. The petition is filed with the city engineer, who checks it and refers it to the council, but, without waiting for action by that body, he proceeds immediately to make a preliminary estimate of the cost of the work and of the charges which will rest upon the land benefited. After the council has passed upon the project a date is set for a public hearing. The property owners affected are notified of the proposed improvement and are invited to confer with the council as to its desirability. Unless strong opposition develops the council then passes an ordinance ordering the improvement to be made. Bids are advertised for, on the basis of the preliminary estimate, the contract is let, and the improvement is constructed under the supervision of the engineer. This official also apportions the final cost among the property owners and prepares an assessment roll, which, after a second hearing, is approved by the council and sent to the treasurer for collection.

In apportioning the costs of a street improvement among the property owners, a very complicated system has been evolved. The area of benefit is assumed normally to extend 90 feet on either side of the improved street, but upon numerous occasions is made much wider than this. The territory affected is divided into strips 30 feet wide, running parallel with the improved street. The strips lying nearest the street bear the heaviest share of the expense, the first being charged with 45 "parts," the second with 25 "parts," the third 20 "parts," the fourth 10 "parts," and the fifth 5 "parts."[5] The total number of parts multiplied by the number of front feet is divided into the total cost. Then each individual's charge is calculated. It will be noticed that the zone system operates to relieve the owners of corner lots of part of the burdens which would be theirs if they were called upon to pay on a frontage basis the cost of improvements on both sides of their lots. This solution of the corner-lot problem is considered satisfactory in the case of all improvements

[1] Laws, Illinois, 1830–31, p. 82.
[2] Ibid., 1837–8, p. 61.
[3] Fifteenth Report of Chicago Board of Public Works, Appendix.
[4] Compiled from the reports of the Department of Public Works.
[5] These parts are not percentages. In case the area of benefit is narrow only a few zones are used, but the number of parts assigned remain the same.

except sewers and water mains, in which cases an owner of a lot which is already served from one street is not compelled to contribute to the cost of laying mains in another street. It must not be thought, however, that the mechanical rule outlined above is applied without variation. A wide discretion is vested in the hands of the city engineer.

In Seattle special-assessment finances are much more completely segregated than in most cities. Not only are they entirely independent of the general municipal finances but each improvement project is considered a separate financial undertaking. Each month a contractor, constructing an improvement, receives from the city engineer a certificate stating the amount of work completed. He presents this to the city comptroller, who issues interest-bearing warrants to the extent of 70 per cent of the value of the completed work. These warrants are often used by the contractors as collateral for bank loans. Thirty days after the completion of the work warrants are issued for the 30 per cent of the cost which has been withheld as a guaranty during the course of construction. As soon as the final assessment rolls are prepared notices are sent to the owners of the property benefited, immediately after which there follows a 30-day period, when cash payments may be made in whole or in part. Any assessments unpaid at the end of this period are payable in ten annual installments with 6 per cent interest. The cash which has been collected is used to redeem part of the contractor's warrants, and local improvement bonds running 10 years and bearing 6 per cent interest are issued at par to the contractor in exchange for the remainder of the warrants. It will be noticed that this throws upon the contractor a share of the burden of financing local improvements. The wisdom of this very common practice may be questioned, for the contractor must insure himself against possible loss by charging a higher price for the work.

WEAKNESSES AND ABUSES OF THE SPECIAL-ASSESSMENT SYSTEM.

Present methods have been arrived at only after painful experiences, and even now the system is nowhere working entirely without friction. There is a record to the effect that when the Dutch in New Amsterdam assessed upon the abutting property the cost of canalizing an inlet located near the present Broad Street in the city of New York, Hendrick, the Baker, was charged with the cost of 5 yards—4½ feet, at 40 guilders per rod. Beside the name there appears on the record this laconic entry: "He refused to pay and was imprisoned."[1] There has never since been a lack of injured and protesting Hendricks.

Of the weaknesses and abuses which have developed in the history of special assessments, many find their origin in that heyday of maladministration of municipal affairs generally which began in the early seventies. The Tweed régime in New York used the special-assessment system as a means of mulcting the property owners on an enormous scale. Extravagant and premature improvements constructed by corrupt contractors served to enrich a group of political grafters and to impoverish the owners of land. More than one-third of the assessments levied between 1870 and 1879 proved to be uncollectible.[2] The situation in Brooklyn at this time was very similar.[3] Overambitious improvement projects also resulted in serious financial embarrassment in a number of New Jersey cities during the seventies.[4] Instances have

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[1] Quoted in Proceedings of Municipal Engineers Assn. of N. Y., 1914, p. 289.
[2] Black, op. cit., p. 77; Rosewater, op. cit., p. 80.
[3] Rosewater, op. cit., p. 78.
[4] Ibid., p. 75.

occurred and still appear from time to time of improvements which are contructed primarily in the interest of contractors who desire work, rather than in the interest of property owners who desire improvements. It has been charged recently that this is true of a number of the grading projects in Seattle, and in the case of some street improvements in New York. But after all, what has been shown by these experiences is that the system can be used by knaves and fools to further their ends and there is little to indicate that special assessments offer a better opportunity for knavery and foolishness than do the alternative methods of paying for local improvements. The remedy is obviously to secure honest and wise administrators, and the great strides which have been made recently in this direction by our municipalities are reflected in the greatly increased satisfaction with special assessments.

An objection sometimes urged as a fault of the special assessment system is that it operates to place the city in the position of partner and financial backer of the land speculator. It is pointed out that a man interested in developing a section of land can transfer to the city and through the city to the prospective purchasers practically the entire cost of improving the tract. Part of this objection can be readily met by insuring that the city administration pursues a policy in authorizing improvements which is conservative enough to insure the city against the loss of its money or credit through the failure of the speculator to sell his lots or of the prospective purchaser to pay his assessments. But there is another point involved. It is claimed that the system of special assessment aids the speculator to deceive the innocent purchaser. Thus, in the Canadian city of Vancouver, complaint has been made that speculators petition for streets unnecessarily wide in order that they may receive larger sums for the condemned land which, together with the increased cost of the paving, is loaded upon the back of the purchaser of the land. For, ofttimes, purchasers do not investigate the assessments outstanding against the land, and in some places, as for example in the city of New York, it is difficult to determine the exact amount of assessments which will have to be paid. The records should show all assessments which are contemplated or pending, as well as those which have actually been confirmed, and the information should be put in such form as to make outright deception impossible. It would be too much to expect of a system to look to it to reconstruct the nature of the careless so they will investigate before they invest, or to change the nature of the shortsighted, so they will recognize a burden as such even though it is divided into many annual installments.

Lack of proper notification has been a prolific source of dissatisfaction. In Chicago a few years ago complaints were particularly bitter, the procedure being such that often the first notice received by the owners of property affected by an improvement was a notice to pay their assessment.[1] In New York at the present time notice of the hearing is sent merely to the signers of the petition for the improvement, who may or may not be owners of the property affected, and whose sentiments are known already from the fact that they are petitioners. It is charged that this arrangement encourages the stimulation of improvements for the benefit of others than those who pay for them, and that the petitions are often signed and filed by persons not legitimately interested. Those cities which have been most successful in administering their system go furthest in the direction of personal notification and ample hearings for those who are to be called upon to pay the assessments.

Danger lurks in the practice of extending the term of payments. The period during which installments may be paid should not exceed a very conservative

[1] Report, Dept. of Public Works, 1889, p. 401.

estimate of the life of the improvement. There have been examples in New York where landowners were paying installments on as many as four street pavements at the same time, three have been worn out and replaced before the first is entirely paid for. This overextension of the period of payments is doubtless responsible for the present peculiar law in New York forbidding the levy of assessments for repaving against a lot which has already been assessed to pay for one first-class pavement.[1]

Another practice which stands condemned in the light of American experience is that of levying and collecting assessments before the cost of improvements is definitely known. The usual result of this practice is that the estimates are made liberal in order to cover all contingencies, the unused balances being returned to the persons assessed. At one time in Chicago the rebates amounted to one-third of the collections.[2] A much better plan is to defer the assessment, or at least a very substantial part of it, until the work is entirely completed.

It will be seen that most of the weaknesses are either not serious in their nature, and easily remedied, or are not peculiar to special assessments. Assuming an honest and fairly-intelligent administration, abuses are unlikely to develop.[3]

THE APPLICABILITY OF THE SPECIAL-ASSESSMENT SYSTEM TO OTHER COUNTRIES.

Any discussion of the applicability of the American system of special assessments to other countries should be preceded by a statement of the causes for its wide use here, for some of the reasons are frankly reasons of compulsion rather than of attraction. Undoubtedly the large rôle which the system has played in some of our cities is explained by the fact that it constituted the only means by which necessary improvements could be secured, limited as the cities were in the tax rates they could impose and the amount of indebtedness they could assume. For special assessments are not classified as taxes under the law, and special-assessment debt is often not included within the debt limit of the city.[4] Even in those cities where there are no burdensome limitations on the tax rate, there is always present a very strong prejudice against a high rate, and special assessments offer an opportunity to have at the same time low nominal taxes and the needed improvements.

But such reasons are in most cases not the important ones. The principle upon which the system rests—of a direct contribution toward the cost by the owner of the property especially benefitted—is one which appeals strongly to everyone's sense of justice. Coupled with this is the psychological advantage which is present when something very definite is given to the individual who is called upon to contribute. Indeed this close relationship between the payment and the construction of a particular improvement is the secret of much of the popularity of the system. Under this plan, it is not necessary to contribute for the cost of the construction of a number of other men's pavements

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[1] Cf. Ormond. loc. cit., p. 212.

[2] Merriam, Report on the Municipal Revenues of Chicago, p. 13, et seq.

[3] One remarkable aspect of the situation is the lack of mutual assistance among the cities in solving the problems of special assessments. Each city appears to have considered its problem largely a local one and has struggled to a solution without availing itself of that of others. It is not unusual to find several cities within a short distance of each other which have painfully worked out independent solutions to the same practical problem. This has made progress unnecessarily difficult, for most of the questions are general in nature and the experience of one place is usually valid in another.

[4] The extent to which the system has been used in Chicago has been attributed to this cause. Merriam, op. cit., p. 13.

before one's own street is paved. Moreover, the plan eliminates, to a large degree, the necessity for using influence of one sort or another with the political powers that be in order to secure attention to need for local improvements. The work can be done when desired and to any amount desired. The system is flexible to a remarkable degree.

In cities which are developing as rapidly as American cities have developed, the number of persons who are interested in the increase in land values is exceedingly large, and undoubtedly one of the important reasons why special assessments are popular is that they serve very well the interests of the speculator. He is relieved of the necessity of paying improvement charges until his land is ripe for the market, and even then the burden upon him is greatly lightened by the use of the plan whereby the cost is made payable in installments. The installment system is used most widely in the case of those improvements which are largely speculative in nature. An investigation made recently in Portland, Oreg., shows that while in the business section assessments were paid in cash in approximately 70 per cent of the cases, the installment method was elected in 96 per cent of the cases when the land affected was speculative in its nature.

It must not be inferred that the great development of the system in this country is due mainly to its usefulness as a tool in the hands of land speculators or to its availability for surmounting legal obstacles to high tax rates. Even where these arguments would be of no weight, it is believed that the system can justify itself amply on the other grounds which have been indicated.

The conditions which have proved most conducive to the success of the special-assessment system in American cities, and which therefore may be considered to be most essential to its successful operation elsewhere, may be briefly summarized as follows:

First. Land values have been rising with great rapidity from causes other than the construction of local improvements, and where this is true they can be counted on to cover many sins of administration.

Second. Where the plan has been most successful, great care has been taken to conform the improvement policy very closely to the desires of the individuals who are depended upon to pay the bills. Fundamentally, the question as to whether the property will be increased in value to a sufficient degree to cover the cost of the improvement is a question as to whether the owners or the users of the land want the improvement badly enough to pay for it. Of course, the city must retain in its own hands the power to initiate improvements which are dictated by a very strong general need, but great dependence should be placed upon initiation by petition. It might be wise to vary the percentage of owners required to sign the petition for various types of improvements. Thus, while 25 per cent might be considered sufficient for the initiation of a street pavement, 95 per cent might be a suitable figure for initiating a project to pay for moth extermination by special assessment. This dependence upon petitions is likely to prove more satisfactory than some of the purely mechanical safeguards which have often been used. Such, for example, as a percentage of the value of the property or a set sum annually.

Third. Too much emphasis can not be placed upon the desirability of certainty in a system of special assessments. The bitterest complaint is that which comes from the man who is asked to pay more than he expected. Where the improvement work is standardized, and where the rules for apportioning the cost are well defined and fully understood, it has been found possible to raise enormous amounts without apparent distress.

Finally, it is a striking fact that the success of the special assessment system in many of our cities is directly traceable to the administrative ability

which has been available. In several places it has been through the efforts of a single individual that the entire assessment policy of a city owes its success. Where the administration has been poor the dissatisfaction has been great, and where conditions are such that good administrators are unavailable, it may be safely said that the special assessment system is foredoomed to failure.

The following papers were presented and read by title at this session:

Reseña general sobre la marcha y desarrollo que han tenido los ferrocarriles colombianos desde 1835 hasta 1914, by Alfredo Ortega.

Ferrocarriles de la República Oriental del Uruguay, by Guillermo Dotte.

Impuestos directos, by Juan A. Márquez.

Abundant vegetable products in Venezuela for dyeing and tanning, by Andrés Ybarra.

RESEÑA GENERAL SOBRE LA MARCHA Y DESARROLLO QUE HAN TENIDO LOS FERROCARRILES COLOMBIANOS DESDE 1835 HASTA 1914.

Por ALFREDO ORTEGA,
Ingeniero Civil de Colombia.

El presente capítulo, puede considerarse como un resumen general de la historia de los ferrocarriles colombianos. En él haremos un recuento de todas las leyes que se refieren al fomento de obras públicas, principalmente ferrocarriles, que si bien no se llevaron a cabo muchas de ellas, desde la fecha en que se promulgó la ley correspondiente, dan a conocer el interés que el país ha tenido siempre por esta clase de empresas, durante su vida administrativa, tan llena de variados cambios y reformas.

Al revisar las disposiciones sobre éstas obras, contenidas en las leyes nacionales, se tropieza con la de 25 de Mayo de 1835, que fué la primera que expidió el Congreso, por la cual se concedieron ciertas franquicias a los cantones de Panamá y Portobelo, de "que gozarán cuando exista un canal o ferrocarril intermarino," ley que debía principiar a regir desde que se estableciera una comunicación franca entre los dos océanos, al través de los dos cantones mencionados, ya fuera por medio de un canal o de un camino de rieles. En esa época, el ciudadano americano Señor Biddle, había explorado el istmo de Panamá y había venido a Bogotá con el fin de obtener un privilegio para la apertura de una vía ferrea entre los dos océanos, que no tuvo efecto, según se verá en la historia del Ferrocarril de Panamá.

La primera ley general sobre fomento de mejoras materiales en el territorio nacional, fué expedida por el Congreso en 28 de Mayo de 1864, y aún cuando en ella no se dispuso nada sobre construcción de ferrocarriles, merece citarse, por cuanto da idea del espíritu progresista que animaba a los representantes de la nación en aquel tiempo.

Las principales obras que el Poder Ejecutivo debía realizar, en virtud de ella, eran: la apertura de un camino carretero que pusiera en comunicación a Bogotá con el río Magdalena; la canalización de este mismo río; la apertura de caminos de ruedas entre las ciudades de Cartagena, Río Hacha, Medellín y los centros poblados de los Estados de Santander y Boyacá, con el mencionado río; el fomento de la navegación por vapor, del río Zulia, y la

comunicación por una vía carretera, entre Cúcuta y este río; el establecimiento de buques de vapor en el río Meta, y la apertura de una vía de este río a la parte más poblada de los Estados de Boyacá y Condinamarca; la construcción de un camino de ruedas de Cali al Puerto de Buenaventura, en el Océano Pacífico; la mejora de las comunicaciones existentes entre los Estados del Tolima, Antioquia y Cauca; el establecimiento de una vía terrestre entre Barbacoas y el centro del Municipio de Túquerres. Además se fomentó la construcción de telégrafos eléctricos y cables submarinos, para la comunicación del istmo de Panamá y el resto de la República. En virtud de esta ley, que fué sancionada por el Presidente Dr. Manuel Murillo Toro, cuenta hoy el país con una red de alambre que une todos los centros poblados del territorio nacional y que mide actualmente 18.164 kilómetros de longitud (Informe del director de correos y telégrafos 1912).

Como la ley de que se viene tratando, facultaba al Gobierno para conseguir un empréstito en el exterior, el Gral Tomás C. de Mosquera, en su carácter de enviado extraordinario y Ministro de Colombia, ante el Gobierno de la Gran Bretaña, celebró el contrato del caso con los Sres Róbinson & Fleming, de Londres, sobre consecución de un empréstito por £1,500,000, que se destinaría al desarrollo de las principales obras, antes indicadas. El Congreso aprobó en principio dicho convenio; pero más tarde lo dejó en suspenso por medio de la ley de 20 de Marzo de 1867 que derogó el artículo pertinente, de la de 28 de Mayo de 1864 antes citada.

Algunas obras pudieron acometerse en su tiempo, como la de la carretera de Cúcuta y la correspondiente al camino de ruedas, entre Cali y Buenaventura. Respecto de esta última por decreto legislativo de 8 de Mayo de 1866, se autorizó al Poder Ejecutivo para que, en su carácter de accionista, en esa empresa, tomara todas las medidas conducentes para proceder a la construcción de la vía, lo más pronto posible y para establecer por ella un ferrocarril. Al efecto, se concedió a los empresarios una prórroga de dos años, para que pudieran dar al servicio público la cuarta parte de ella y de cuatro años más, para completarla y darla al servicio público. Esta fué la precursora del ferrocarril del Pacífico. Después de celebrados los diferentes contratos relativos a la construcción del ferrocarril de Panamá, que aprobó el Congreso por medio de las leyes de 4 de Julio de 1850 y 16 de Agosto de 1867, entró más tarde el Poder Legislativo a considerar, en el año de 1868, el contrato que pactó el Secretario de Hacienda y Fomento con el Sr. Percy Brandon, por sí y como apoderado del Señor Nicolás Jimeno Collante, sobre construcción de un camino de ruedas y establecimiento de un telégrafo eléctrico entre el Puerto de Sabanilla, sobre el Océano Atlántico y la ciudad de Barranquilla, el cual quedó aprobado por medio de Decreto de 23 de Mayo de 1868, con algunas modificaciones, entre las cuales estaba la obligación de los contratistas de comprobar ante el Gobierno Nacional que habían adquirido los derechos concedidos por el Estado de Bolivar a los Sres Ramón Santodomingo Vila y Ramón B. Jimeno, en 10 de Febrero de 1868, para el establecimiento de un camino de rieles servido por máquinas de vapor, entre los mismos puntos antes mencionados. En la historia de cada uno de estos ferrocarriles, se verá el curso que tomaron las negociaciones de que se viene hablando.

El Decreto Legislativo de 16 de Mayo de 1865, hizo algunas concesiones para la construcción del camino carretero de Cúcuta al Puerto de San Buenaventura, sobre el río Zulia y dispuso que continuaran vigentes las exenciones que se concedían en el caso de que se llevara a cabo la construcción de un ferrocarril, por dicha carretera, el cual se llevó a cabo pocos años después.

Es digno de notarse que los ferrocarriles de Panamá, Bolivar y Cúcuta, se ejecutaron con capital aportado por las respectivas compañías concesionarias

y no llegaron a causar erogaciones importantes al tesoro público. Algunos, como el de Panamá, produjeron más bien a la Nación renta de cierta consideración, según se verá adelante.

La primera ley general, sobre fomento de ferrocarriles, fué expedida por el Congreso el 5 de Junio de 1871, y quedó sancionada por el presidente de la Unión, Gral Eustorgio Salgar. Está marcada con el No. 59, y por ella, además de fomentarse la colonización de tierras baldías y algunas mejoras materiales, se autorizó al Poder Ejecutivo para ofrecer una garantía del 7% de interés anual sobre el capital que se invirtiera en el desarrollo de ciertas empresas de transportes, principalmente ferrocarrileras, las cuales debían comunicar con el río Magdalena, las capitales de los Estados de Antioquia, Boyacá, Cundinamarca, Magdalena y Santander. Derogó las leyes anteriores sobre consecución de empréstitos para estas mismas obras y dispuso lo siguiente: el Gobierno podía ofrecer una garantía de interés del 7% anual por el término de 25 años y sobre un capital, hasta de $11,900,000, oro que en su totalidad se aplicaría a esas obras. Si en el curso de cinco años consecutivos, cada empresa produjere utilidad igual a la suma que se garantizaba, cesaba para el Gobierno la obligación de continuar el servicio de la garantía.

La ley señaló además ciertas condiciones a que debían ceñirse los contratos que celebrara el Gobierno, tales como la determinación clara y precisa de la naturaleza de la obra que debía ejecutarse; de los términos para principiarla, terminarla y darla al servicio público; de las tarifas; del tiempo de duración del privilegio que se concedía para explotar la empresa; de las causales de caducidad de la concesión, entre las cuales, se hallaba la de traspaso a Gobierno extranjero; de las concesiones que podían darse en tierras baldías; de la exención de derechos nacionales, durante el privilegio, para los materiales que se introdujeren con destino a la empresa. Para atender al servicio de la garantía, la ley destinó el 25% de recargo adicional sobre los derechos de importación, que se causaran en las aduanas y además el derecho adicional de $0.20, por cada 12½ kilogramos sobre el precio de venta de la sal, de elaboración oficial. Destinó igualmente un total hasta de 5,000,000 de hectáreas de tierras baldías, que se distribuirían entre las empresas que se acometieran.

La ley contenía, fuera de estas disposiciones, otras referentes a la apertura de algunas vías acuáticas y terrestres; a la colonización e inmigración; sobre práctica de los estudios necesarios para llevar a cabo el ferrocarril del Norte, obra a la cual se le daba preferencia.

Para facilitar la consecución de capitales en el exterior, que pudieran aplicarse a estas empresas, ordenó el Gobierno que se hicieran publicaciones en los países extranjeros para hacer conocer la ley, principalmente de los tenedores de bonos de la Deuda, en Londres y Amsterdam, con el fin de ver si ellos se interesaban en llevarlas a cabo.

A pesar de las estipulaciones de suma importancia que contenía esta ley, la cual, por otra parte, había sido estudiada detenidamente en beneficio de los intereses nacionales, no fué suficiente para obtener la ejecución de ninguna de las obras a que se refería. La corta duración, dos años, de los encargados del Gobierno en el Poder, hacía insuficiente el tiempo que pudiera destinarse a desarrollar plan alguno, en esa época de difícil y lentas comunicaciones con el exterior.

Después de la presidencia del Señor Salgar, volvió al poder el Doctor Murillo Toro y le tocó sancionar la ley 52, de 1872 que autorizó al ejecutivo para promover la construcción de nuevas líneas telegráficas en el territorio nacional; fomentar la apertura de caminos de herradura y la navegación por vapor de varios ríos; prestar atención al fomento, por cuenta de la Nación, de una línea de

trasportes mixta, interoceánica, que debía partir desde la bahía de Buenaventura, en el Océano Pacífico, y atravesar la parte más densa en población, de los Estados del Cauca, Tolima, Cundinamarca, Boyacá y Santander, hasta terminar en un puerto sobre el río Magdalena, de fácil comunicación con el Océano Atlántico; todo esto sin perjuicio de que se fomentaran también las obras de que trataba la ley 69, de 1871, las referentes al ferrocarril de Cúcuta al río Magdalena y el que debía comunicar dicho río, con alguna población importante del Departamento de Soto, hoy Santander. Desde entonces quedó determinada, en sus líneas generales, la red ferroviaria a que la Nación ha venido concretando sus esfuerzos por realizarla.

El Gobierno acometería la construcción de la línea férrea, interoceánica, a medida que lo permitieran los recursos del Tesoro Nacional, y quedaba facultado para comenzar los trabajos por sus extremidades, a saber: de Buenaventura, hacia el río Cauca, y del río Magdalena hacia Bogotá, por la vía del Norte.

También quedaba el Gobierno facultado para ofrecer la garantía de interés del 7% anual, tanto para estas, como para las otras obras, determinadas en leyes anteriores.

El Poder Ejecutivo, celebró por consiguiente con el apoderado de una compañía americana denominada "Cauca Valley Mining and Constructing Company," un contrato, que aprobó el Congreso por medio de la ley 66 de 1872, para la construcción y explotación del Ferrocarril de Buenaventura al río Cauca, por el término de 60 años.

Más tarde, por medio de la Ley 64 de 1873, quedó sancionado el contrato del 24 de Febrero de ese mismo año, modificatorio del anterior. En la historia del Ferrocarril del Cauca se verá el curso que tuvo esta negociación, la cual fracasó totalmente, sin que los contratistas hubieran alcanzado a colocar el primer riel.

Dejaron en poder del Tesoro Nacional el depósito, que por $25,000 oro habían consignado en un banco para garantizar el cumplimiento de sus obligaciones. Tampoco tuvo éxito la tentativa que se hizo para ejecutar la obra por el otro extremo. En efecto: por medio de la Ley 9, de 10 de Marzo de 1873, el Congreso aprobó, con algunas modificaciones, el contrato celebrado por el Dr. Aquileo Parra, en su carácter de Secretario de Hacienda y Fomento, con el Sr. Roberto A. Joy, referente a la construcción de un ferrocarril, entre el lago de Paturia, en las orillas del río Magdalena y la ciudad de Bucaramanga, con un ramal a la ciudad de Cúcuta.

En dicho contrato, el Gobierno se obligó a pagar $105,000, anuales, durante diez años, en bonos, del 7% de interés anual, que entregaría a la compañía que el concesionario debía organizar, para llevar a cabo la obra; al finalizar ese período ella haría devolución al Gobierno, por cantidades de a $50,000, anuales, de las sumas que hubiere dado aquél.

Se fomentaba además la obra, con una subvención de 300 hectáreas de tierras baldías, por cada kilómetro de vía férrea, sobre la base de que ésta mediría 160 kilómetros de longitud. Se fijaron algunas condiciones técnicas para su construcción, así como las tarifas que debía cobrar la empresa, las causales de caducidad y algunas otras cláusulas de importancia, pero el contrato no llegó a tener efecto alguno, a pesar de que la ley 51, de 1874, aprobó nuevas bases para contratar, con el Señor Joy, en mejores condiciones que las anteriores y aumentó las concesiones de que podía disfrutar el contratista para el caso que realizara esta obra.

Otros esfuerzos que hizo el Gobierno por la realización de este proyecto, no tuvieron efecto. Como el ferrocarril del Norte, que estaba entonces en estudio,

debía partir de la capital y atravesar territorio de los estados de Boyacá y Santander, podía hacer parte de la vía inter-oceánica. El Congreso autorizó al Poder Ejecutivo, por la ley 58, de 1872, para contratar su construcción y llevarla a efecto, sin que el contrato requiriera la aprobación del Poder Legislativo, siempre que la suma destinada al pago de la garantía de interés, no excediere de un millón de pesos anuales. Más tarde, la ley 89 de 1873, adicionó la anterior y autorizó nuevamente al Gobierno para que llevara a cabo este ferrocarril y para que otorgara las concesiones siguientes:

Un privilegio por 50 años, para explotar la empresa; una garantía de interés, durante veinticinco años, a la rata del 7% anual, sobre un capital hasta de $20,000,000 que se invirtiera en la obra y sus anexidades; exención de impuestos y de contribuciones públicas. Autorizó al Gobierno, igualmente, para emitir bonos, amortizables en el término de 25 a 50 años, del 7% de interés, y medio por ciento, de fondo acumulativo de amortización, hasta un total de $20.000,000, ó bien, para que pudiera lanzar un empréstito por aquella suma, dentro de las condiciones que señaló para el caso en que se llevara a cabo tal operación.

El producto líquido que de esta manera se obtuviera, se aplicaría exclusivamente a la construcción del ferrocarril, obra que se llevaría a cabo por una compañía, a la cual se le podrían ofrecer acciones en la empresa, con el fin de estimularla. En caso de que no se presentara ningún particular, o compañía, a contratar la obra, el Gobierno quedaba facultado para llevarla a cabo, con fondos nacionales. El ferrocarril quedaba bajo la inmediata dirección del Gobierno Nacional, por formar parte de la línea inter-oceánica.

La misma ley autorizó la prolongación del ferrocarril de Bolívar, la construcción del de Santa Marta y fomentó otras obras de interés público.

El ofrecimiento de la garantía del 7% anual y las ventajas y privilegios que otorgaron tanto ésta, como las demás leyes que expidío el Congreso, posteriormente, no fueron suficientes para interesar capitales extranjeros en esas obras, con excepción de los ferrocarriles de Bolívar y de Cúcuta, que se construyeron por aquella época. Otros, como los de Riohacha, aprobado por la ley 90, de 1873 y La Dorada, que autorizó el Congreso per medio de las leyes 108 de 1873, 6 de 1874 y 52 de 1875, quedaron por entonces en proyecto.

Algunos años más tarde, cuando se vió que no era posible contratar la obra del ferrocarril del Norte, el Poder Legislativo, por medio de la ley 62, de 1878, que sancionó el Dr. Santiago Pérez, como Presidente de la República, dió autorizaciones al Poder Ejecutivo para suscribir acciones por valor de $1.000,000, que se pagarían por anualidades de a cien mil pesos cada una, en la empresa que se trató de organizar con el contratista inglés Sr. Ross, para construir el ferrocarril Central y un ramal a la ciudad de Cúcuta, siempre que no se llevara a efecto el contrato para el Ferrocarril del Norte, por la vía del río Carare, afluente navegable del Magdalena. También lo facultó para conseguir un empréstito hasta de $2,000,000 para esa obra.

La ley anterior no pudo cumplirse y fué modificada por la 51 de 1879, que autorizó el Gobierno para descontar los dividendos que le correspondían en la renta del Ferrocarril de Panamá, por el tiempo que fuere necesario para obtener $3,000,000, los cuales se destinarían para la construcción de un ferrocarril, de carácter nacional, que debía partir de un punto situado abajo de la población de Honda, en las orillas del río Magdalena y atravesar territorio de los estados de Cundinamarca, Boyacá y Santander, hasta concluir en Puerto Wilches.

Para entrar en negociaciones con la compañía del Ferrocarril de Panamá, en el sentido que se ha dicho, quedó autorizado el Gobierno, por medio de la ley 78, de 1880. Obtenido el empréstito se aplicó en su mayor parte a pagar

deudas urgentes nacionales, y el saldo se destinó a la fundación del Banco Nacional y a la construcción del Ferrocarril de Girardot, que por aquel tiempo se había contratado, hasta la población de Tocaima, en el kilómetro 30.

La forma de auxilio directo, dado por el Gobierno, fué más eficaz que el de garantía de interés, como que los ferrocarriles de Antioquia, para cuya obra dió en ese tiempo la Nación la suma de $1.000,000, por entregas anuales de $100,000 cada una, además de la cesión de 100,000 hectáreas de tierras baldías y de otras concesiones que se hicieron, en virtud de la ley 18, de 1874; el del Cauca, para el cual se dió gran parte del auxilio ofrecido por $3,000,000, que representaba la mitad de esta empresa, hasta el río Cauca; y además 200,000 hectáreas de tierras baldías, fuera de los privilegios y exenciones consignados en el contrato que aprobó la ley 25 de 1878; el de la Dorada, que fué subvencionado con $7,000, por cada milla que el contratista entregara al servicio público (Ley 5 de 1882); el de Girardot, para el cual se destinó la cantidad de $554,000 para el trayecto hasta Tocaima, y de $230,000, para la parte comprendida entre esta última población y Juntas de Apulo, de acuerdo con las autorizaciones que dió la ley 58, de 1881, empresas todas estas a cargo del Señor Francisco J. Cisneros, inteligente y activo empresario cubano que vino al país desde 1874; el de Puerto Wilches, que por aquel tiempo acometió directamente el Gobierno de Santander, con el auxilio nacional de $400.000 anuales, y el de Santa Marta, que fué subvencionado, con $60.000 anuales, durante el término de quince años, en virtud de la ley 12 de 1880, pudieron iniciarse y construirse en sus primeros kilómetros.

En el año de 1885, antes de la guerra civil, que estalló en aquel tiempo, contaba ya el país con algunos kilómetros de líneas férreas, representados por los siguientes ferrocarriles:

Panamá, al través del Istmo	80
Bolivar, de Puerto Salgar a Barranquilla	27
Santa Marta (en construcción)	12
Cúcuta al río Zulia	54
Cauca (en construcción)	25½
Girardot (en construcción)	31
Antioquia (en construcción)	37½
La Dorada (en construcción)	15
Puerto Wilches (en construcción)	4
Total	286

Además de los ferrocarriles nacionales, el Estado de Cundinamarca tenía en construcción el de la Sabana de Bogotá a Facatativá y había contratado el del Norte, entre Bogotá y Zipaquirá.

Según el informe que rindió al Gobierno el Señor Dámaso Zapata, apoderado del Señor Cisneros, publicado en el Diario Oficial No. 6129, existían 109 kilómetros de vía férrea, en las líneas de Antioquia, el Cauca, la Dorada y Girardot, cuya construcción estaba a cargo de aquel contratista, en los cuales, con el equipo correspondiente, se habían invertido cerca de $2,722,878. Se contaban 213 puentes, de los cuales 10 eran de hierro y se encontraban en camino, para el lugar de su destino, como el de Honda, para el río Magdalena, y el del Piñal, para el brazo de mar entre Buenaventura y el Continente. Es indudable que el progreso nacional es acreedor al señor Cisneros por el impulso que éste dió a las vías públicas, pues aparte de las anteriores, tenía bajo su dirección, la navegación por buques de vapor en el alto y el bajo Magdalena, se había hecho cargo de la prolongación del Ferrocarril de Bolivar y del muelle correspondiente y tenía en construcción el Tranvía de Barranquilla.

Pasada la guerra de 1885, se cambió la Constitución del país y los Estados independientes se convirtieron en Departamentos, que quedaron sujetos al Gobierno central. Las empresas férreas se paralizaron por causa de la guerra y algunas, como la de Puerto Wilches, sucumbieron. Más tarde, vino el régimen del papel moneda y el crédito del país se afectó notablemente en el exterior. Así pues, el Señor Cisneros no pudo desarrollar el plan que había concebido de que se hablará en otro capítulo y se vió obligado a separarse de las empresas de Antioquia, Cauca y Girardot. Posteriormente cedió la concesión de la Dorada a una compañía inglesa, actualmente cesionaria de ella y en 1888, se desprendió del ferrocarril de Bolivar, por traspaso que hizo a una compañía extranjera.

Con el fin de no perder las sumas que se habían invertido en la construcción de vías férreas, el Congreso autorizó al Poder Ejecutivo por medio de la ley 124, de 1887 para que hiciera una emisión de billetes del Banco Nacional, la cual se destinaría, en parte para atender a los gastos de conservación y explotación y a los trabajos de prolongación, en las líneas del Cauca, de Girardot y de la Sabana, y a pagar el saldo que la Nación adeudaba por la compra del Ferrocarril de Bolivar, hecha desde el año de 1875. Estos auxilios, unidos a los productos del tráfico de cada empresa permitieron salvar a todas ellas del fracaso total en que se vieron amenazadas.

El Gobierno continuó atendiendo al pago de los auxilios decretados por leyes anteriores, para las empresas de Antioquia y de Santa Marta. Respecto del Ferrocarril del Cauca, celebró un contrato, que aprobó la ley 4, de 1886, con el Señor Juan Gaulmin, apoderado del Cónde de Goussencourt, para la construcción de una red ferrocarrilera que debía partir simultáneamente del Puerto de Buenaventura, hasta Girardot, y de Puerto Wilches, hasta Bogotá, por la vía del Norte. El contrato contenía además estipulaciones sobre construcción de otras líneas férreas, como la de Antioquia y la de Cartagena, y de haberse cumplido habría resuelto el problema del ferrocarril inter-oceánico ideado por el Dr. Murillo Toro.

Como dato interesante, anotaremos que en este contrato la Nación le otorgaba al concessionario, una garantía del siete por ciento anual, sobre un capital estimado a razón de $42,000 por kilómetro de vía de un metro entre rieles, y le hacía otras concesiones valiosas, pero la obra no se llevó a cabo, debido principalmente a que por aquel tiempo fracasó la compañía francesa que tenía a su cargo la construcción del canal de Panamá. La Sociedad de origen franco-belga a la cual el contratista traspasó este contrato, no pudo levantar fondos para acometer la obra y como hubiera dejado vencer el plazo fijado en el contrato para dar principio a los trabajos, se declaró la caducidad de la concesión. Esta resolución del Gobierno ocasionó al país la primera reclamación, causada por contratos relativos a ferrocarriles; y para transarla, se pactó un arreglo, que fué autorizado por la Ley 87, de 1892, por el cual se pagó al apoderado de la Sociedad la suma de cuarenta mil francos y los intereses, al siete por ciento, sobre $100.000 que la compañía había depositado para garantizar su contrato y que fué preciso devolverle igualmente.

En el año de 1888, el Congreso expidió las leyes 108, sobre concesión, al Señor Indalecio Liévano, de un privilegio para construir el ferrocarril del Noroeste, por la vía Poncet; 135, que dió al Gobierno autorizaciones para comprar acciones en el Ferrocarril de Antioquia; y 144, sobre compra para la Nación de los derechos que el Departamento del Cauca tuviera, en el ferrocarril del mismo nombre, y sobre autorizaciones al Gobierno para continuar la obra por su cuenta.

El Congreso, en el año de 1890, aprobó gran número de concesiones ferrocarrileras que no tuvieron efecto y que habrían puesto al Tesoro Nacional

en graves compromisos. Como dato interesante las indicaremos a continuación.

Por medio de la ley 50, de 17 de Noviembre, se autorizó la construcción de ferrocarriles y la explotación de hulleras en la Costa Atlántica y para fomentar esas empresas el Gobierno otorgaría una subvención de $5,000 en moneda corriente, por cada kilómetro de ferrocarril que construyeran los Departamentos.

La ley 100, que aprobó el contrato celebrado con el Sr. Rafael Fernández, para la construcción y explotación de un camino de hierro entre la ciudad de Ocaña y el río Magdalena, mediante un privilegio que otorgaba el Gobierno por 99 años, y de una subvención kilométrica de $2,500 oro, además de las exenciones que se concedían a esta clase de empresas y de las concesiones correspondientes, entre las cuales estaba la cesión gratuita de 10.000 hectáreas de tierras baldías;

La 91, que aprobó el contrato referente a la prolongación del ferrocarril de la Dorada, hacia el Norte, hasta el puerto de Conejo, sobre el Río Magdalena, y hacia el Sur, desde el puerto de Arrancaplumas, hasta el de Cambao, para subir luego a la altiplanicie, hasta el sitio de los Manzanos, cercano a la ciudad de Facatativá. Por esta ley se concedía un privilegio por 99 años, para explotar la empresa; una subvención kilométrica, de ocho mil pesos oro; el derecho a 10,000 hectáreas de tierras baldías, fuera de las demás exenciones pertinentes;

La 67, sobre auxilio al Ferrocarril de Antioquia en proporción de $5.000 oro por kilómetro;

La 66, que aprobó el contrato de construcción del Ferrocarril de Cúcuta al Río Magdalena;

Además, en ese tiempo fué expedida la ley 56 sobre expropiaciones por causa de utilidad pública, la cual fué reformada en ese mismo año, por la ley 119, y más tarde por medio de la ley 104 de 1892, hoy vigente.

Respecto del Ferrocarril del Cauca, que, como se ha dicho, el Poder Ejecutivo tenía por la ley 144, de 1888, autorización para continuar los trabajos, celebró el Gobierno con el súbdito americano, Señor James L. Cherry, un contrato, que aprobó la ley 16, de 1890, y por el cual, le garantizó un interés del 5% anual sobre un precio kilométrico de $38.000 oro, por el término de 18 años, y destinó para atender el servicio de esa garantía, el 50% del producto bruto de las aduanas del Pacífico. Este contrato tampoco se cumplió, y le motivó al país una enojosa reclamación, que, con los gastos que se hicieron, llegó a valer $903.382 oro, sin computar los perjuicios que sufrió el ferrocarril con el abandono en que quedó, por varios años.

Mas tarde, el Gobierno contrató esta misma obra con los señores Muñoz y Borrero, contratistas nacionales y posteriormente, por haber fallecido este último, con el Señor Muñoz. En el tiempo en que tuvieron a su cargo la empresa, se reconstruyo la línea, se hicieron algunas obras adicionales, se prolongó la carrilera, hasta el kilómetro 47, con un gasto de $1,013,251, incluyendo en esa suma el monto de la resción que fue necesario hacer de tales contratos, en el año de 1905, cuando la empresa fué entregada a los concesionarios señores Mason, quienes ofrecieron suministrar capital para continuar la línea hasta la ciudad de Palmira y no lo consiguieron.

En 1892, el Congreso aumentó las concesiones ferrocarrileras por medio de las siguientes leyes:

La 43, que modificó el contrato de construcción del ferrocarril de Ocaña, citado anteriormente;

La 75, sobre auxilio al ferrocarril de Bucaramanga a Puerto Wilches;

La 83, sobre autorizaciones al Poder Ejecutivo para fijar la inteligencia definitiva del contrato de compra-venta del ferrocarril de Bolivar; que vendió la Nación en 1884 al Sr Carlos Uribe;

La 86, sobre aprobación del contrato del Ferrocarril de Girardot, celebrado con el Sr. John H. Pennington;

La 97, que aprobó el contrato celebrado con los señores Leal, González y Compañía, reformatorio del de 13 de Octubre de 1890, para la construcción del Ferrocarril de Cúcuta al río Magdalena;

La 121, que aprobó el convenio celebrado con el Gobierno de Cundinamarca sobre compra-venta para la nación, de 6000 acciones privilegiadas en la compañía del Ferrocarril de la Sabana;

La 104, general de ferrocarriles, de la cual trataremos adelante;

Decretó igualmente una subvención de $760,000 oro para el ferrocarril de Cartagena, por medio de la Ley 42.

Además, el Gobierno, en virtud de las autorizaciones de la ley general de ferrocarriles, celebró los siguientes contratos: El marcado con el No. 7, de 1893, sobre construcción del ferrocarril de Barbacoas a Túquerres, de un ramal hasta la ciudad de Pasto y de otro hasta Ipiales, mediante una garantía de interés del cinco por ciento anual, durante quince años, sobre un capital de $30,000 oro por kilómetro (Diario Oficial #9059);

El de fecha 27 de Junio de 1893, celebrado con el Señor Julio Barriga, para construir un ramal del Ferrocarril de la Sabana, hasta la Ferrería de la Pradera, por medio de un auxilio de $15,000 en moneda corriente, por kilómetro, y para una longitud total de 35 kilómetros. Este contrato está publicado en el Diario Oficial No. 9211;

El Gobierno modificó el contrato referente al Ferrocarril de Ocaña, por medio del marcado con el No. 10, de 1894, publicado en el Diario Oficial No. 9595.

Hemos hecho una relación de todos los contratos que se celebraron por aquel tiempo, para hacer ver el afán que se apoderó del país por obtener líneas férreas, aun cuando fuera preciso conceder auxilios y privilegios valiosos, y sin plan determinado anteriormente. Obedecían al hecho de atender, en muchos casos, solicitudes de contratistas, que carecían de capacidad fiscal suficiente para realizar la obra que contrataban. Como prueba de imprevisión, por parte de la Nación se puede señalar, por ejemplo, la subvención que dió a título gratuito al ferrocarril de Cartagena, por un total que casi representaba el valor de esa empresa, y sin que se hubiera exigido en cambio ventaja alguna para el país, ya fuera en forma de acciones, para tener mayoría en la empresa y que le hubieran permitido intervenir de una manera directa en la rebaja de tarifas, en beneficio de las industrias y del comercio, o bien en el trasporte gratuito de los correos, tropa y empleados oficiales, &.

Y la observación que hacemos respecto del ferrocarril de Cartagena, tiene aplicación también para las demás empresas que ha subvencionado la Nación, en virtud de la expresada ley 104, de 1892, de cuyo estudio nos ocuparemos en capítulo aparte.

Inútil sería continuar haciendo una relación de todos los contratos que ha celebrado el Gobierno hasta hoy, únicamente daremos la relación de los que llegaron a cumplirse, y de las erogaciones que hizo el Tesoro Nacional por tal motivo. Estos fueron:

Ferrocarril de La Dorada:		
Sección de 13 kilómetros y 460 metros, subvencionada con $10,000 oro por kilómetro, que se construyó de conformidad con el contrato de 11 de Marzo de 1893, entre el Puerto de Yeguas, kilómetro 20, y el de La Dorada, sobre la margen izquierda del río Magdalena	13 ks. 460 m.	$134, 600

Ferrocarril de La Dorada—Continued.			
Sección de 80 kilómetros de linea principal, y de 8 kilómetros más, en apartaderos, subvencionada con $9,900 por kilómetro, de conformidad con el contrato de 26 de Julio de 1905, referente a la prolongación de este ferrocarril, entre Honda y Ambalema	88		877, 338
Ferrocarril de Girardot:			
Sección de 38 kilómetros, construidos entre Juntas de Apulo y el Hospicio, subvencionada a razón de $10,000 oro por kilómetro, en virtud del contrato de 26 de Diciembre de 1894	38		380, 000
Ferrocarril del Tolima:			
Sección de 25 kilómetros construida de conformidad con el contrato de 6 de Marzo de 1897, entre Girardot y el Espinal, subvencionada a razón de $9,840 oro el kilómetro	25		246, 000
Ferrocarril del Sur:			
Sección de 30 kilómetros construida entre Bogotá y Santa Isabel, subvencionada a razón de $10,000 oro por kilómetro, de conformidad con el contrato de 6 de Julio de 1895	30		300, 000
Ferrocarril de Cucuta a la frontera venezolana:			
Sección de 16 kilómetros 200 metros subvencionada con $50,000, de conformidad con el contrato celebrado en 27 de Agosto de 1908, modificatorio del celebrado el 17 de Abril de 1893	16	200	50, 000
Suma	210 ks.	660 m.	$1, 987, 938
Además, el Congreso por medio de la Ley 42 de 1892, autorizó al Gobierno para conceder al Ferrocarril de Cartagena una subvención por $760.000 oro, línea que mide 105 kilómetros de longitud y se inauguró al servicio público el 1° de Agosto de 1894	105		760, 000
Suma total	315 ks.	660 m.	$2, 747, 938

Como puede verse, en el curso de 14 años se construyeron 315 kilómetros de vía férrea, en diversas líneas, con un costo en el cual no está computado el valor a que ascendieron las exenciones de derechos de aduana; de impuestos nacionales, departamentales y municipales; el precio de las tierras baldías; privilegios, & ni tampoco el de las fuertes indemnizaciones que la Nación ha tenido que pagar en algunas reclamaciones de extranjeros, quienes obtuvieron privilegios que no cumplieron y se valieron de esa circunstancia para entablar fuertes reclamos contra el Tesoro Público.

Ferrocarriles departamentales.—La ley 50, de 1890, subvencionaba con $5,000, cada kilómetro de línea férrea que construyeran los Departamentos con sus propios recursos y siempre que no hubieran obtenido otra clase de auxilios para esas obras. Esta ley no llegó a tener efecto, y fué más eficaz la ley 61, de 1896, en vigor, por la cual se concedió una subvención de $10,000 oro por cada kilómetro, pagadera en bonos contra las Aduanas que se amortizan un año después de ser expedidos y ganan el 6% de interés anual.

Como ferrocarriles departamentales, podemos citar en primer lugar el de Antioquia, que, en virtud de la ley 18, de 1874, recibió un auxilio en dinero de

$1,000,000, que sirvió para la construcción de los primeros 50 kilómetros. Por medio de la ley 57, de 1888, el Congreso dispuso que fuera de cargo de la Nación la mitad de la subvención que otorgara la Gobernación de Antioquia al celebrar el contrato de prolongación y siempre que dicha mitad no pasara de $5,000 oro por kilómetro. En caso de que se otorgara garantía de interés, sería cubierta por mitad entre la Nación y el Departamento. Con esta autorización pudo pactar la Gobernación de aquel Departamento los contratos que celebró en 1892 con una casa inglesa, denominada Punchard, MacTaggar, Lowther & Co., los cuales aprobó el Poder Ejecutivo, pero que no tuvieron cumplimiento, aun cuando sí originaron una reclamación enojosa contra el Tesoro por $200,000 oro más las sumas que se gastaron, por cuenta de la Nación, por valor de $148,873 y por la del Departamento, por $110,129 en moneda corriente de aquel tiempo. (Ferrocarril de Antioquia Nos. 460/461.)

En virtud de la ley 61 de 1896, que parece fué expedida expresamente para este ferrocarril, de los auxilios del Departamento y de los productos netos de la explotación, se pudieron adelantar por administración, los trabajos desde el kilómetro 50 en adelante, hasta la ciudad de Medellín, con excepción de un trayecto inconcluso en el punto denominado La Quiebra. Por los 117 kilómetros de carrilera que hay construidos hasta la fecha, le ha reconocido la Nación la suma de $1,170,000 oro y tendrá que reconocer lo correspondiente al trayecto de La Quiebra, que no medirá menos de 30 kilómetros, por los cuales tendrá que dar $300,000 aproximadamente.

Otro ferrocarril, que tuvo carácter departamental fué el de Puerto Wilches a Bucaramanga, que auxilió la Nación con la suma de $400,000 anuales, en cumplimiento de la ley 51 de 1879. Solamente se alcanzaron a pagar dos anualidades que sirvieron para organizar la empresa, introducir algunos materiales del exterior y construir cerca de cinco kilómetros. Con la guerra que estalló en 1885 la obra quedó suspendida y en completo abandono. Los materiales se destinaron a la construcción de otras lineas férreas que estaban en obra por ese tiempo.

El ferrocarril del Cauca, fué adquirido por la Nación, por compra que hizo a ese Departamento de los derechos que le pertenecían y de conformidad con las disposiciones consignadas en la ley 144 de 1888.

El de Santa Marta, fué iniciado en 1881, de acuerdo con el contrato que celebró la Gobernación del extinguido Estado, hoy Departamento, del Magdalena, con los Sres Manuel J. de Mier y Roberto A. Joy, contrato que aprobó la ley Nacional No. 53, de 17 de Junio de 1881, que está aún vigente, con las modificaciones que posteriormente se le han introducido. De acuerdo con el primitivo contrato, la línea férrea debía unir la ciudad de Santa Marta, Capital de dicho Estado, con el río Magdalena, en el sitio de San Antonio. En cumplimiento de las leyes 6, de 1879 y 12, de 1880, recibió un auxilio nacional de $60,000 anuales, durante 15 años, el cual se entregó en libranzas especiales contra las aduanas del Atlántico. Más tarde la ley 51 de 1887, aprobó el contrato celebrado entre las mismas partes, modificatorio del anterior, que cambió la estación terminal del ferrocarril, por otra, en el sitio denominado "El Banco" sobre el mismo río Magdalena. La compañía a la cual hicieron traspaso los concesionarios de los contratos ya citados, no pudo cumplir la obligación de terminar el ferrocarril, y por ese motivo, celebró directamente con el Gobierno nacional otros contratos adicionales, el último de los cuales, que fué aprobado por la ley 61 de 1903, dispuso que el ferrocarril debía llevarse a Plato, lugar intermedio, comprendido entre los puertos de "San Antonio" y "El Banco." Para obtener esta nueva concesión la Compañía hizo renuncia de nuevas adjudicaciones de baldíos, y se comprometió a devolver las libranzas del auxilio oficial que estaban en su poder y que no habían sido amortizadas

como también los títulos de baldíos, que se le habían entregado y no hubieran sido adjudicados. En cambio, el Gobierno se obligó a dar una garantía de interés, del 6% anual, sobre £3,500 por kilómetro, de vía férrea que construyera la empresa desde el sitio de Fundación en adelante. Como la Compañía no ha prolongado la línea de esa estación, no ha llegado el caso de servir la garantía.

La ley 6, de 1909, permitió a esta empresa construir diferentes ramales que sirvieran a los cultivadores de bananos, para el transporte de la fruta, y modificó favorablemente las tarifas de transporte.

La línea principal mide hoy 96 kilómetros, entre Santa Marta y Fundación, y tiene 36 kilómetros más de ramales.

El Ferrocarril de la Sabana, fué inaugurado al servicio público el 20 de Julio de 1889. La obra fué iniciada por la Gobernación del antiguo Estado de Cundinamarca y se llevó a cabo por una compañía nacional. En virtud del cambio político que ocurrió después de la guerra de 1885, esta entidad se vió privada de gran parte de sus rentas y para atender a los trabajos de construcción de esta línea, y cancelar su deuda con el Banco Nacional, vendió a la Nación 6,000 acciones de la empresa, en virtud del contrato No. 98 de 1892, que aprobó el Congreso por medio de la ley 121, de ese mismo año. Más tarde, el Gobierno nacional, autorizado por la ley 104, general de ferrocarriles, compró al Departamento 5,990 acciones restantes, por contrato de 26 de Abril de 1898. De este modo la Nación adquirió 11,990 títulos sobre un total de 12,000 que componen la empresa. Los diez restantes vinieron a su poder en 1914, y así quedó dueña de su totalidad. El tiempo señalado en el contrato de construcción de fecha 28 de Julio de 1886, para usufructuar la empresa vencerá el 28 de Julio de 1951, fecha en la cual deberá pasar con sus anexidades y dependencias a ser de propiedad de Cundinamarca.

Ferrocarril de Bogotá a Zipaquirá. El contrato que sirvió para contruir este trayecto de vía férrea, fué celebrado por la Gobernación de Cundinamarca con los Sres Alberto Urdaneta y Juan Ma. Fonnegra y quedó aprobado por la ley 30, de 1884, dada por la Asamblea de ese extinguido Estado, hoy Departamento. Los contratistas no pudieron cumplir oportunamente sus obligaciones por causa de la guerra que estalló por aquel tiempo. Más tarde, entraron a contratar directamente la obra con el Gobierno Nacional y celebraron varios convenios, entre otros, el de fecha 26 de Febrero de 1889, en que se les concedió un auxilio de $15,000 en moneda corriente, por kilómetro, en calidad de devolución. Al celebrar esos contratos, el Gobierno se apoyó en las autorizaciones de leyes anteriores como la 89 de 1873, la 42 de 1877 y otras.

En 15 de Junio de 1892, el Gobierno celebró un nuevo contrato adicional de los anteriores, en el cual fijó el monto total del auxilio que con carácter devolutivo se debía dar a esta empresa, en la suma de $1,050,000; y en $100,000 más el valor de la carretera del Norte comprendida entre Chapinero y Puente del Común, así como el de otras zonas de caminos y de propiedades de particulares que compró la Nación para esa línea. El ferrocarril se inauguró al servicio público el 15 de Abril de 1896, en una extensión de 47 kilómetros hasta Zipaquirá.

A fines de 1889, estalló la última revolución que, por los caracteres graves que asumió, ha hecho comprender la necesidad que tiene el país de conservar la paz pública dentro del territorio nacional. Durante su duración, que fué de tres años, las líneas férreas sufrieron desastrosas consecuencias y quedaron casi arruinadas, principalmente aquellas que dependían directamente del Gobierno. Algunas, como la de Antioquia, pudieron rehacerse fácilmente debido a los productos del tráfico y al apoyo del Departamento; otras, como las del Cauca, Girardot y el Tolima fueron auxiliadas por la Nación y se salvaron de un fracaso.

A mediados del año de 1904, se encargó de la Presidencia de la República el Gral Rafael Reyes, quien impuso el régimen unitario central. La Asamblea Nacional constituyente y legislativa que se reunió en 1905, expidió varias leyes, que dieron facultad al Gobierno para contratar algunos ferrocarriles, y para garantizar un interés del 7% anual, sobre el capital que se invirtiera en la construcción de aquéllos. También se autorizó al Ejecutivo para vender o hipotecar los ferrocarriles de propiedad nacional o departamental, con el fin de conseguir fondos para esta clase de empresas. La misma Asamblea, por medio del Acto Legislativo No. 7, que se derogó por el Acto Legislativo No. 3, de 1910, reformó el artículo 185 de la Constitución, en el sentido de que las Asambleas de los Departamentos no tuvieran intervención en celebrar contratos sobre ferrocarriles, los cuales quedaron bajo la inmediata dirección del Gobierno, por la ley 60 de 1905.

En el capítulo que trata de la Deuda Exterior, se habla detenidamente de las leyes y decretos legislativos pertinentes. Solamente trataremos ahora de los contratos que se hicieron en cumplimiento de ellas. Estos fueron:

El de 30 de diciembre de 1905, celebrado con los Sres. Alfredo y Eduardo Mason, súbditos americanos, para la reconstrucción del ferrocarril del Cauca, entre Buenaventura y el kilómetro 47, equipo, y prolongación de la línea férrea, desde este último punto hasta la ciudad de Palmira, pasando por Cali. Este convenio está hoy vigente y fué transpasado en 1907 a la Compañía Nacional denominada Ferrocarril del Pacífico, la cual lo está cumpliendo satisfactoriamente. En la actualidad tiene trabajos establecidos entre Cali y Popayán y entre Cali y Palmira, e intenta acometer los correspondientes a la sección de Palmira á Cartago.

Los de fechas 11 de marzo de 1907, 22 de septiembre de 1908 y sus adicionales y modificatorios, de 1° de agosto de 1907 y 10 de enero de 1908, sobre nuevos arreglos con la Compañía inglesa a cuyo cargo está el Ferrocarril de Girardot, para reconstruir la línea y prolongarla, desde el kilómetro 77, en la estación del Hospicio, hasta Facatativá, en el kilómetro 132. El Gobierno otorgó a esta empresa, en cambio de la subvención kilométrica de $10,000 oro estipulada en el contrato primitivo de 1894 una garantía de interés, del 7% anual sobre un capital de £880,000 emitidas en bonos de tercera y cuarta hipoteca, que se colocaron al 70% de precio, cuyo producto se destinó en gran parte a cubrir los intereses devengados y no pagados por la Compañía, provenientes de las dos emisiones anteriores que había hecho la empresa, en 1899, en uso de las autorizaciones del contrato de 1894, por valor de £200,000 y £400,000, respectivamente. Fué de esta manera como pudo continuarse el ferrocarril hasta la altiplanicie, a donde llegó en 1909.

El de fecha 18 de abril de 1905, referente a la construcción, equipo y explotación del ferrocarril de Puerto Wilches a Bogotá, celebrado con el Señor Enrique Cortés, en su carácter de apoderado de los Señores Julio Patiño y Fernando R. de Schmatzer. Este contrato estipuló una garantia del 7% anual sobre $40,000 oro por kilómetro y autorizó a los contratistas para emitir bonos respaldados con el usufructo de la empresa. Mas tarde, en los convenios adicionales de fechas 4 de julio y 26 de septiembre de 1906, los contratistas lograron introducir una modificación a la facultad de emitir bonos, de la cual hicieron uso y ocasionaron a la República enojosas cuestiones que han impedido la continuación de los trabajos en obra tan importante. En la actualidad solamente existen veinte kilómetros de línea, de Puerto Ramos hacia Bucaramanga.

El de 22 de septiembre de 1905, celebrado con The Colombian Northern Ry Co. Ltd sobre prolongación del ferrocarril de Zipaquirá a Chiquinquirá,

por medio de una subvención de $9,990 oro, por kilómetro. En virtud de este contrato, se construyó una sección de 15 kilómetros hasta Nemocón, pero la compañía que obtuvo el traspaso de esa concesión suspendió los trabajos y solicitó modificaciones para el contrato que el Gobierno se abstuvo de conceder por juzgarlas inaceptables.

En la escritura pública número 772, de 21 de abril de 1905, otorgada en la Notaría 5a de Bogotá, se encuentra inserto el convenio sobre compra para la Nación del Ferrocarril del Sur que mide 30 kilómetros, por $300,000 oro. Aún cuando esta negociación ocasionó al Gobierno algunos pleitos, que falló favorablemente la Corte Suprema de Justicia, más tarde el ferrocarril vino definitivamente á su poder, el 3 de julio de 1912. El Ministerio de Obras Públicas dispuso acometer por su cuenta la construcción de un ramal de 9 kilómetros, hasta la catarata del Tequendama.

Por medio de la ley 18, de 1905, la Asamblea Nacional aprobó un contrato para llevar a cabo el ferrocarril de Urabá a Medellín, celebrado con el Sr. Henry Granger, que fué caducado más tarde, por falta de cumplimiento.

Tambien celebró el Gobierno con una compañía nacional el contrato relativo a la construcción del ferrocarril de Amagá, que aprobó la ley 26 de 1907 y por el cual se otorgó a esta una subvención kilométrica de $9,990 oro para la parte plana de la línea, y de $15,000 oro para la parte montañosa. Este contrato se está cumpliendo satisfactoriamente por la compañía, la cual ha dado hasta hoy al servicio público, 36 kilómetros y 730 metros de vía por los cuales se le ha reconocido la subvención correspondiente, por $474,750 oro, en bonos, del 6% anual, amortizables en las aduanas del Atlántico, en un 3% de los derechos de importación que en ella se causen. Está destinado a comunicar la ciudad de Medellín con el río Cauca.

La ley 62 de 1905 aprobó el contrato celebrado por el Gobierno con el apoderado de la Compañía del Ferrocarril de Santa Marta, sobre construcción y usufructo de dos muelles en la bahía de la ciudad del mismo nombre, que fueron cumplidos oportunamente. Por este contrato el Gobierno tiene derecho a un 10% y el Departamento del Magdalena, a un 5%, del producto neto de la empresa.

Otros contratos celebró el Gobierno, por conducto del Ministerio de Obras Públicas, referentes a la construcción de ferrocarriles, tranvías eléctricos, establecimiento de cables aéreos & de los cuales, a título de información unicamente, mencionaremos los siguientes, pues se declararon caducados por falta de cumplimiento, y pueden considerarse como antecedentes de los que en la actualidad estudian en el terreno varias comisiones de ingenieros nacionales.

Estos son:

El de fecha 5 de agosto de 1905, celebrado con el Sr. Julian Bucheli, para la construcción del ferrocarril de Pasto al Océano Pacífico, el cual se halla publicado en el Diario Oficial No. 12450.

El de 16 de abril de 1904, y sus adicionales, de fechas 9 de junio y 12 de diciembre, de 1905; y 21 de mayo de 1906, celebrados con el Señor José Manuel Goenaga, para la construcción y explotación del ferrocarril de Riohacha que pueden verse en el Diario Oficial Nos. 12109, 12600 y 12676.

El referente a la construcción del ferrocarril de Tundama, celebrado con en Señor Tomás G. Ribón el día 1° de abril de 1907 (Diario Oficial No. 12912).

El de fecha 8 de agosto de 1907, celebrado con el Señor George de Slane, para construir el ferrocarril de Cúcuta a Tamalameque, con varios ramales (Diario Oficial No. 13067/68).

El de 3 de marzo de 1905, celebrado con el Sr. Mauricio Brochet, para la construcción de la línea férrea de la Goagira hasta Bucaramanga, con varios ramales.

Todos estos contratos, de haberse cumplido, habrían puesto el tesoro de la República en graves compromisos y pueden considerarse únicamente como tentativas que hizo el Gobierno para realizar esas obras. Más tarde, en 1910, el Cuerpo Legislativo, derogó las leyes de autorizaciones dadas al Ejecutivo, en 1905, y esta corporación ha venido interviniendo directamente en el estudio correspondiente a nuevas concesiones ferrocarrileras. Aún cuando virtualmente no está derogada la ley 104 de 1892, el Congreso ha adoptado un rumbo distinto en las leyes que posteriormente ha dado, el cual, en tesis general, es el siguiente:

Conceder autorizaciones al Poder Ejecutivo para que nombre una comisión de igenieros que haga previamente un estudio sobre el terreno, de la línea férrea en proyecto, mediante el cual, y con el conocimiento de los planos, perfiles, presupuestos, de tiempo y de dinero, memorias y demás documentos que se elaboren pueda ilustrarse el Gobierno.

Una vez que sean presentados al Ministerio de Obras Públicas estos documentos se pasarán en consulta al estudio de la Sociedad Colombiana de Ingenieros, para que emita concepto y puedan ser o nó aprobados oficialmente.

Facultar al Ejecutivo para que gestione la consecución de un empréstito que sea suficiente para atender a la construcción y equipo del ferrocarril en proyecto. También puede contratar la obra, ya sea por determinado precio kilométrico, o bien por administración, cubriendo su valor con fondos nacionales y reconociendo una comisión no mayor del 12%. En el contrato de construcción se fijarán la anchura de la línea, el peso de los rieles, los radios de curvatura, las pendientes y demás condiciones técnicas de ella.

La obra una vez terminada, deberá quedar del dominio absoluto de la Nación, para que la administre directamente, ó la dé á una Compañía arrendataria ó que dependa del Gobierno.

Determinar los gravámenes que deben afectar las rentas nacionales, los cuales están destinados para atender el servicio del empréstito. Fijar claramente las condiciones en que puede conseguirse este, tales como descuento inicial, interés anual y fondo de amortización.

Facultar al Gobierno para que emita bonos, libranzas, o documentos de crédito público con interés, para darlos en prenda, o para descontarlos, con el fin de conseguir fondos para la empresa.

Puede la Nación organizar una Compañía por acciones, en que ella tenga mayoría y que se encargue de la construcción de la obra.

Los productos netos del ferrocarril, se deberán aplicar a reducir la responsabilidad financiera del Gobierno.

Los contratos que se celebren de conformidad con estas autorizaciones, no requieren ulterior aprobación del Congreso.

En esta forma, se han expedido, entre otras, las leyes 65 y 89 de 1912, relativas a la construcción de los ferrocarriles de Pasto al Océano Pacífico y de Cúcuta al Río Magdalena. En la actualidad, las comisiones de ingenieros nombradas para estudiar el trazado correspondiente a estas lineas se encuentran sobre el terreno.

El Congreso, por medio de la ley 56, de 1912, había autorizado la inversión de una suma que se destinaría para celebrar en la ciudad de Cali la llegada del ferrocarril del Pacífico, pero posteriormente, a causa de los desastres en la vía que ocurrieron por fuertes lluvias excepcionales, ordenó, por medio de

la ley 75, de 1912, que se hiciera un contrato para reconstruir la línea destruida. Este se firmó el 11 de Febrero de 1913 y está publicado en el Diario Oficial No. 14,829. El valor que se invirtió en esa obra fué de $1,226,422 oro.

Con motivo de las diferencias pendientes entre el Gobierno, el Departamento del Magdalena, y la Compañía del Ferrocarril de Santa Marta, el Congreso, por medio de la ley 51 de 1912, autorizó al Gobierno para celebrar los arreglos amigables del caso, que hasta la fecha no se perfeccionaron a pesar de los convenios preliminares pactados entre el Ministerio de Obras Públicas y el Representante de la Compañía. Tocará al próximo Congreso estudiar nuevamente este asunto, para solucionarlo satisfactoriamente.

Por medio de la ley 71, de 1912, fué aprobado por el Congreso el contrato celebrado con los herederos del concesionario Señor Carlos Tanco, sobre compra para la Nación de la empresa del ferrocarril del Tolima, por la cantidad de $30,000 oro. Los trabajos de reconstrucción y prolongación de esta vía se llevaron a cabo por administración oficial y actualmente se explotan 30 kilómetros dados al servicio público, desde el mes de Julio de 1914. Esta obra se ejecutó con fondos nacionales.

El Congreso dió autorizaciones al Ejecutivo, por la ley 48 de 1911, para la consecución de un empréstito hasta de $1,000,000 destinado para prolongar esta línea, de las cuales no ha hecho uso aún.

Con el fin de terminar las diferencias que se habían suscitado entre el Gobierno y las Compañías, inglesa la una y colombiana la otra, por el contrato de compra-venta del ferrocarril del Sur, el Ministerio de Obras Públicas celebró con los respectivos apoderados de ellas, el contrato que aprobó el Poder Legislativo por medio de la ley 73 de 1912.

También quedó aprobado por esa misma ley, el referente a la consecución del empréstito que se obtuvo con el Banco de Colombia por $325,000 oro para cancelar los créditos que gravaban esta empresa.

Posteriormente, se han expedido otras leyes sobre ferrocarriles, como la 64, de 1913, referente a la construcción del ferrocarril de Medellín a Urabá, obra que está en estudio, y la 105 de 1914 para auxiliar el de Caldas, que subvencionará la Nación con $15,000 oro por kilómetro, respectivamente; la 30 de 1914, referente a la construcción del ferrocarril del Caquetá, la del ferrocarril del Meta, y otras, relativas a varias líneas que para no ser prolijos no indicaremos, pues tenemos la convicción de que no podrán realizarse, a pesar de la buena voluntad que ha manifestado y sigue manifestando el Congreso, al dedicar gran parte del tiempo destinado a sus labores, al estudio de las leyes pertinentes.

El siguiente cuadro comparativo indica la longitud que los ferrocarriles colombianos tenían en los años de 1904 y 1914.

Ferrocarril de—	1904.	1914.
	Kilómetros.	
Antioquia—		
Sección del Nus	66	109
Sección del Porce	0	59
Amagá	0	36, 730
Barranquilla	27	27
Cartagena	105	105
Cúcuta	55	55
Cúcuta al Táchira	16	16
Cauca	20	178
Girardot	49	132

Ferrocarril de—	1904.	1914.
	Kilómetros.	
La Dorada	33	111
Tolima	17	30
Norte	47	62
La Sabana	40	40
Santa Marta (línea directa)	67	98
Sur	23	30
Ramal en dirección al Salto	0	5
Puerto Wilches	0	20
Panamá	80	80
Suma total	648	1, 194, 730

Según se observa, el país aunque lentamente, ha venido aumentando su expansión ferroviaria, principalmente en las líneas de una yarda, anchura que domina en el ramal de la red del Pacífico.

Una vez que Colombia haya adelantado suficientemente la construcción de su red interna ferroviaria, que como se ha visto, está destinada a unir entre sí la parte densa y poblada del interior de la República con sus ríos navegables, las costas de sus océanos y las fronteras de los países limítrofes, deberá hacer esfuerzos por medio de su Cancillería en el sentido de celebrar tratados con las Naciones vecinas, que permitan enlazar, con las de aquéllas sus vías férreas, a fin de poder establecer vínculos de fraternidad y solidaridad internacional, y para contribuir así a solucionar el proyecto ya ideado por el notable ingeniero uruguayo Sr. Juan José Castro, que fué planteado en el Congreso Científico Latino Americano de 1898, precursor del que próximamente tendrá lugar en Washington, en 28 de Diciembre de 1915. La Argentina, Bolivia, Chile y el Perú, van desarrollando ese programa.

"Más, mucho más, sin duda alguna, que los hombres de cancillería han hecho en el sentido de la solidaridad internacional, los ingenieros; y allí están, para probarlo, los ferrocarriles entre el Perú y Bolivia, entre Bolivia y la Argentina, entre Chile y Bolivia y entre Chile y la Argentina, a cuya influencia, para el futuro en el desarrollo de esa solidaridad, tiene que ser muy eficaz. El día en que siquiera todas las capitales de los paises sudamericanos estén unidas estrechamente por líneas férreas, la paz y el progreso sentarán en ellas definitivamente sus reales" (Ricardo Tizón y Bueno—La comunicación ferroviaria directa entre Lima y Buenos Aires).

Tal vez no esté lejana la época en que Colombia forme igualmente en el concierto de estas naciones y surja potente y próspera a una nueva vida. Así se impondrá mejor a la consideración del mundo, por la fuerza que le dará ese acercamiento; por la abundancia de sus productos agrícolas, mineros e industriales; por lo propicio de sus mercados; y por la bondad de su territorio, apto para recibir cuantiosa inmigración de elementos sanos.

Las futuras generaciones bendecirán la memoria de aquellos que prestaron su colaboración en el desarrollo de ese grandioso plan y principalmente la de los ingenieros que lograron llevarla a cabo.

Esa obra trascendental podrá considerarse por su magnitud y por el cúmulo de esfuerzos que en ella se han invertido, semejante a la magna de la independencia, la cual a su vez vino a ser consecuencia de la epopeya de la conquista acometida por las huestes españolas. A todas estas deberá agregarse la labor lenta, llena de dificultades y tropiezos que ha desarrollado el país, para afianzar su nacionalidad independiente y colaborar al progreso universal.

FERROCARRILES DE LA REPÚBLICA ORIENTAL DEL URUGUAY.

Por GUILLERMO DOTTE,
Montevideo, Uruguay.

INFORME.

Los ferrocarriles que están actualmente en explotación pertenecientes todos ellos á empresas constituidas y radicadas en Londres, fueron construidos con arreglo a las respectivas concesiones sobre la base de la garantía o subvención del Estados y con amplias fránquicias representadas por liberación de derechos aduaneros, exoneración de contribución inmobiliaria, patentes, etc.

En estas condiciones y de acuerdo con la concesión de 4 de Octubre de 1866 se estableció el primer ferrocarril en el país (F. C. Central) con la garantía de 7% sobre el costo de £10,000 por milla de vía abierta al servicio, en toda su extensión hasta el Durazno, subscribiéndose además el Gobierno, á un determinado número de acciones de la Compañía.

La explotación empezó en 1869 sobre un trayecto aproximado de 20 kms. mientras se proseguía la construcción hasta su punto terminal (Véase anexo Tabla A).

Posteriormente, por contrato celebrado con fecha 25 de febrero de 1878 fué subrogada la primitiva concesión otorgándose otra con las mismas franquicias y demás exenciones por el término de 40 años.—La Empresa renunciaba para siempre a la garantía del Estado y éste le cedía las acciones que tenía de la misma, a la vez que le reconocía una deuda por el monto de $1.000,000. La Empresa por su parte se obligaba a llevar la línea hasta el Durazno a cuyo fin le fué concedida una subvención de $25,000 anuales durante el término de 10 años.

La prosecución de la línea hasta el Paso de los Toros (Río Negro) fué motivo de la ley de septiembre 24 de 1884 que autorizó la emisión de la deuda denominada "Fomento de Ferrocarriles" entregada íntegramente a la Compañía como subvención á razón de $2,350 por milla, cuya deuda fué amortizada, de acuerdo con los términos de la ley, con el excedente del 8% del producto de la línea desde su punto de arranque en Montevideo.—(Véase fecha en que fué librado al servicio en anexo Tabla A.)

El Ferrocarril Higueritas que según la concesión debía partir desde 25 de agosto (empalme con el Central) hasta el punto que lleva la misma denominación de la línea, sólo fué construído hasta San José en una extensión de kms. 33. La explotación a cargo del Central se inició en mayo de 1876 y la garantía que se le había acordado en las mismas condiciones que al Central fué renunciada a partir del 1° de julio de 1880, mediante la entrega que le hizo el Estado de la suma de $700,000,—en títulos de la "Deuda Ferrocarril a Higueritas."

La ley de 23 de octubre de 1868, autorizó la construcción del F. C. Noroeste (Alto Uruguay) desde el Salta a Rosa sobre la frontera del Brasil, de acuerdo con las bases acordadas al Central.

Sería muy largo enumerar las dificultades de distinto orden que hubo que salvar para hacer posible la realización de este ferrocarril.—Lo que es innegable, es que el Estado dándole, entonces, a esta línea, más importancia de la que en realidad tiene, hizo verdaderos sacrificios para que no se malograra su construcción.—Y es así, como estando paralizadas las obras después de construida apenas la mitad de la línea, se dictó la ley de febrero de 1881 acordándole nuevas prórrogas á la vez que se le entregaban títulos de deuda por la suma de $1,800,000,—como cancelación de garantías atrasadas y como compensación por renuncia que hacía de la misma en el futuro.—La Empresa

se obligaba, por su parte, a terminar en un plazo breve la línea hasta la frontera.

Viene después el Ferrocarril Nordeste, o sea Ramal Nordeste del Central, con una extensión de 36 kms. de vía, puesto al servicio público en septiembre de 1882.

En tal situación se dictó la ley de 27 de agosto de 1884 determinando el Trazado General de Ferrocarriles en toda la República, estableciendo las bases a que debían ajustarse las nuevas concesiones a otorgarse, reglamentando la construcción de las líneas concedidas y garantizando un interés de 7% anual sobre un costo de £5,000 por klm. de vía con su equipo correspondiente. (Véase anexo respectivo.)

Al amparo de esta ley o sobre bases análogas, fueron construídos los demás ferrocarriles que están en explotación, inclusive el Noroeste desde el km. 97,500 hasta la frontera. (Véase anexo correspondiente.)

Como única excepción, pueden citarse las líneas de los Ferrocarriles del Oeste (Ext. Oeste del F. C. Central), para cuya construcción el Estado concurrió con la suma de £1,200,000, aplicable exclusivamente á este objeto, separadas del monto emitido al efectuarse el arreglo de la Deuda Externa, según convenio de Agosto de 1891.

El interés garantizado, que bajo el régimen de la Ley de Agosto de 1884 era de 7% al año, solo rigió hasta Diciembre de 1891. En virtud del Convenio de 26 de Agosto de ese año, celebrado entre el Agente financiero del Gobierno y los representantes de las compañías existentes en aquella época, aquel régimen fué modificado, quedando reducido el tipo de 7% a 3 y 1/2% al año, con arreglo a bases estipuladas (Véase anexo correspondiente.)

Las condiciones económicas de los respectivos ferrocarriles podrán apreciarse por los datos estadísticos que se acompañan, del año 1912–913 completados en parte con los años 1913–914 y 1914–915.

Por contrato ratificado por ley de Diciembre 28 de 1914, el Estado ha convenido en adquirir la línea Trinidad-Durazno de la cual era concesionaria la "The Pan American Transcontinental," cuya construcción se supone que quedará definitivamente terminada dentro de un plazo de 3 meses.

Los siguientes contratos han sido realizados ad-referendum, por el P. Ejecutivo.

Uruguay Railway Company.—Trazado:—A.—Montevideo a Florida y Florida á Paysandú, pasando por Trinidad. B.—Olmos a empalmar con la linea Montevideo-Florida. C.—San Carlos á Rocha. (Longitud aproximada en total kms. 490.)

La misma Compañía.—Adquición por el Estado de la línea que esta Empresa construye desde el Puerto de La Paloma a Rocha. (Longitud aproximada kms. 30.)

MacArthur Brothers de N. York.—Trazado; Florida a Carpintería, pasando por Sarandí de Yí, Farruco y Cuchilla Caraguata. (Longitud aproximada kms. 400.)

ANEXO Nº I.

DATOS ESTADÍSTICOS, AÑO 1912-1913.

Nómina de las líneas de explotación.

1	2	3	4	5	6	7	8	9
Número de orden.	Nómina de los ferrocarriles.	Trocha.	Longitud.					
			Línea principal.			Ramales.		
			Con garantía.	Sin garantía.	Total. C. 4-C. 5.	Con garantía.	Sin garantía.	Total. C. 7-C. 8.
		Metros.		*Kilometros.*			*Kilometros.*	
1	Central	1.435		273,140	273,140	886,770.29	434,921.15	1,321,691.44
f	Montevideo a Río Negro al Norte			273,140	273,140			
	Montevideo-Piedras			19,655				
	Piedras-Progreso			6,770				
	Progreso-Canelones			16,235				
	Canelones-25 de Agosto			20,712				
	25 de Agosto-Florida } Florida-Durazno }			141,342				
	Durazno-Yí			4,254				
	Yí-Molles			35,567				
	Molles-Río Negro al Sud			25,986				
	Río Negro al Sud-Río Negro al Norte			2,619				
f	Ramal a San José (antes Ferrocarril a Higueritas)	1.435						
	Juan Chazo (25 de Agosto) a San José						32,500	32,500
f	Ramal Local-Montevideo a Estación Manga [1]	1.435					16,000	16,000
d	Ramal Nordeste (antigua vía)-Montevideo a Pando	1.435					35,983	35,983
c	Extensión al Oeste	1.435					339,175	339,175
	San José-Puerto del Sauce						105,175	
	Rosario-Colonia						66,000	
	Mal Abrigo-Mercedes						168,000	
c	Ramal Nordeste-Pando a Minas [1]	1.435				88,317		88,317
	Pando-Tapia							
	Tapia-Montes							
	Montes-Solís							
	Solís-Minas							
	Ramal Nordeste-(Ramal Verdun La Coronilla) [2]						10,480.60	10,480.60
a	Extensión al Norte-Río Negro al Norte a Rivera [3]	1,435				296,856.74	782.55	297,639.29
	Río Negro-Achar					66,000		
	Achar-Piedra Sola					46,716		
	Piedra Sola-San Fructuoso					62,284		
	San Fructuoso-Tranqueras } Tranqueras-Rivera }					117,542.45	782.55	
	Ramal a la Frontera					4,314.29		
b	**Extensión al Este**	1,435				501,596.55		501,596.55
	Toledo a Melo					396,901.80		396,901.80

	Toledo-San Ramón					57,700		
	San Ramón-Reboledo					50,800		
	Reboledo-Mansavillagra					50,000		
	Mansavillagra-Nico Pérez					47,700		
	Nico Pérez-Cerro Chato					50,095.30		
	Cerro Chato-Tupambaé					54,208.20		
	Tupambaé-Fraile Muerto					50,000		
	Fraile Muerto-Melo					36,398.30		
	Ramal Nico Pérez a Treinta y Tres					104,694.75		104,694.75
	Nico Pérez-Retamosa					50,000		
	Retamosa-Treinta y Tres					54,694.75		
2	Noroeste:							
	Salto al Cuareim	1.435	80,257	97,500	177,757		1,043	1,043
	Salto-Itapebí							
	Itapebí-Palomas							
	Palomas-Arapey							
	Arapey-Santa Ana							
	Santa Ana-Yacuy							
	Yacuy-Isla Cabellos		50,120					
	Isla-Cabellos-Zanja Honda		30,137					
	Zanja Honda-Santa Rosa							
	Santa Rosa-Cuareim [4]						1,043	
3	Midland	1.435	317,036.10		317,036.10	197,332.93		197,332.93
a	Paso de los Toros (Río Negro) a Salto		317,036.10		317,036.10			
	Río Negro-Merinos		80,654.69					
	Merinos-Paysandú		124,924.31					
	Paysandú-Salto		111,457.10					
b	Ramal Algorta a Fray Bentos	1.435				[5] 139,855.73		139,855.73
	1. a Sección					52,000		
	2. a Sección					53,000		
	3. a Sección					34,855.73		
c	Ramal Tres Arboles a Piedra Sola	1.435				[6] 57,477.20		57,477.20
4	Norte	1.435	114,155.27		114,155.27			
	Isla Cabellos (empalme con el F. C. Noroeste a San Eugenio)—							
	Isla Cabellos-Cuaró		54,036.79					
	Cuaró-San Eugenio		60,118.48					
5	Uruguayo del este	1.435	114,370.30		114,370.30			
	Olmos (empalme con el ramal Nordeste del F. C. Central) a Maldonado—							
	Empalme Olmos-La Sierra		50,418.57					
	La Sierra-Maldonado		63,951.73					
	Longitud total		625,818.67	370,640	996,458.67	1,084,103.22	435,964.15	1,520,067.37
	Promedio de explotación en 30 de Junio		625,818.67	370.640	996,458.67	1,035,943.92	435,181.60	1,471,125.52

[1] Este Ramal formaba parte del primitivo Ferrocarril de Montevideo a Pando (Nordeste).
[2] A los efectos de la estadística se considera como un ramal muerto.
[3] En explotación en 30 de Junio de 1913, kilómetros 293,325.
[4] Devengará garantía cuando se libre al servicio el puente internacional sobre el Cuareim. Actualmente para la estadística se considera como un ramal muerto.
[5] La garantía hasta el 30 de Junio se liquidó sobre 139.773.
[6] Librado el servicio el 30 de Abril de 1913. Promedio en explotación en 30 de Junio k. 12,932.37.

Nómina de las líneas de explotación—Continuación.

1	2	10	11	12	13	14	15	16	17	18
Número de orden.	Nómina de los ferrocarriles.	Longitud. Total general. Con garantía. C. 4-C. 7.	Longitud. Total general. Sin garantía. C. 5-C. 8.	Longitud. Total general. Total. C. 6-C. 9.	Ley de concesión.	Contrato de explotación.	Apertura de la línea al servicio público. Decreto.	Apertura de la línea al servicio público. Apertura efectiva.	Nombre de la compañía que representa al ferrocarril.	Domicilio de la administración del ferrocarril.
			Kilómetros.							
1	Central	886, 770. 29	708, 061. 15	[1]1, 594, 831. 44					F. C. Central	Montevideo.
f	Montevideo a Río Negro al Norte.		273, 140	273, 140	Ocbre. 4/866					
	Montevideo-Piedras						Ocbre. 27/869	Enero 1°/869		
	Piedras-Progreso						Nbre. 12/871	Nbre. 15/871		
	Progreso-Canelones							Abril 1°/872		
	Canelones-25 de Agosto						Julio 11/872	Nbre. 16/872		
	25 de Agosto-Florida						Julio 8/874			
	Florida-Durazno							Mayo 16/874		
	Durazno-Yí							Nbre. 15/879		
	Yí-Molles						Fbro. 1°/886	Fbro. 2/886		
	Molles-Río Negro al Sud						Fbro. 17/887	Julio 15/886		
	Río Negro al Sud-Río Negro al Norte.							Enero 6/887		
f	Ramal a San José (antes Ferrocarril a Higueritas).								F. C. Central	Montevideo.
	Juan Chazo (25 de Agosto) a San José.		32, 500	32, 500	Marzo 29/870	Marzo 31/876	Mayo 15/876	Mayo 20/876		
f	Ramal Local-Montevideo a Estación Manga.[2]		16, 000	16, 000					F. C. Central	Montevideo.
d	Ramal Nordeste (antiguo) (a)-Montevideo a Pando.		35, 983	35, 983				Sbre. 17/882	F. C. Central	Montevideo.
e	Extensión al Oeste		339, 175	339, 175	Mayo 26/896	Agosto 25/899			F. C. Central	Montevideo.
	San José-Puerto del Sauce						Nbre. 17/899	Nbre. 17/899		
	Rosario-Colonia						Marzo 29/901	Marzo 29/901		
	Mal Abrigo-Mercedes						Nbre. 29/901	Nbre. 29/901		
c	Ramal Nordeste-Pando a Minas.[3]	88, 317		88, 317	Julio 30/884	Fbro. 15/889			F. C. Central	Montevideo.
	Pando-Tapia						Abril 14/888	Abril 14/888		
	Tapia-Montes						Sbre. 26/888	Sbre. 26/888		
	Montes-Solís						Nbre. 13/888	Nbre. 13/888		
	Solís-Mina						Enero 4/889	Enero 6/889		
	Ramal Nordeste-(Ramal Verdun La Coronilla).[4]		10, 480. 60	10, 480. 60						

	Extensión al Norte-Río Negro al Norte a Rivera.[5]	296, 856. 74	782. 55	297, 639. 29	Agosto 30/888	Ocbre. 26/888; Nbre. 7/888	Nbre. 19/890	Nbre. 23/890	F. C. Central.	Montevideo.
	Río Negro-Achar									
	Achar-Piedra Sola						Abril 23/891	Fbro. 1°/891		
	Piedras Sola-San Fructuoso.						Abril 28/891	Mayo 1°/891		
	San Fructuoso-Tranqueras						Fbro. 4/892	Fbro. 5/892		
	Tranqueras-Rivera									
	Ramal a la Frontera							Nbre. 1°/913		
b	Extensión al este	501, 596. 55		501, 596. 55	Véase Ramal Nordeste.	Mayo 28/889			F. C. Central.	Montevideo.
	Toledo a Melo—									
	Toledo-San Ramón						Sbre. 19/890	Sbre. 20/890		
	San Ramón-Reboledo						Abril 23/891	Fbro. 1°/891		
	Reboledo - Mansavillagra.						Mayo 18/891	Mayo 20/891		
	Mansavillagra - Nico Pérez.						Agosto 28/891	Sbre. 1°/891		
	Nico Pérez-Cerro Chato						Abril 23/908	Mayo 15/908		
	Cerro Chato-Tupambaé.						Nbre. 5/908	Nbre. 15/908		
	Tupambaé - Fraile Muerto.						Julio 15/909	Julio 18/909		
	Faile Muerto-Melo						Julio 29/909	Agosto 1°/909		
	Ramal Nico Pérez a Treinta y Tres —									
	Nico Pérez-Retamosa						Sbre. 29/910	Ocbre. 1°/910		
	Retamosa-Treinta y Tres						Sbre. 30/911	Ocbre. 1°/911		
2	Noroeste:									
	Salto al Cuareim	80, 257	98, 543	178, 800	Ocbre. 23/868				F. C. N. Oeste.	Salto.
	Salto-Itapebí							Junio 22/874		
	Itapebí-Palomas							Agosto 17/874		
	Palomas-Arapey							Ocbre. 15/874		
	Arapey-Santa Ana							Junio 22/875		
	Santa Ana-Yacuy							Junio 1°/878		
	Yacuy-Isla Cabellos						Ocbre. 13/886	Nbre. 1°/886		
	Isla Cabellos-Zanja Honda									
	Zanja Honda-Santa Rosa									
	Santa Rosa-Cuareim[6]						Abril 13/887	Abril 20/887		
3	Midland	[7] 514, 369. 03		514, 369. 03	Nbre. 12/884				F. C. Midland.	Paysandú.
a	Paso de los Toros (Río Negro) a Salto.	317, 036. 10								
	Río Negro-Merinos						Julio 25/889	Agosto 15/889		
	Merinos-Paysandú						Abril 11/890	Abril 17/890		
	Paysandú-Salto						Ocbre. 29/890	Nbre. 1°/890		

[1] Excluyendo el Ramal Verdun-La Coronilla y el Ramal a la Frontera puesto al servicio después del 30 de Junio, resultan en explotación k. 1,580,036.55.
[2] Este Ramal formaba parte del primitivo Ferrocarril de Montevideo a Pando (Nordeste).
[3] A los efectos de la garantía se estableció como apertura definitiva el 6 de Enero de 1889.
[4] A los efectos de la estadística se considera como un ramal muerto.
[5] En explotación en 30 de Junio de 1913, kilométros 293,325.
[6] Devengará garantía cuando se libre al servicio el puente internacional sobre el Cuareim. Actualmente para la estadística se considera como un ramal muerto.
[7] Promedio en explotación en 30 de Junio k. 469,741.47.

Nómina de las líneas de explotación—Continuación.

1	2	10	11	12	13	14	15	16	17	18
Número de orden.	Nómina de los ferrocarriles.	Longitud.			Ley de concesión.	Contrato de explotación.	Apertura de la línea al servicio público.		Nombre de la compañía que representa al ferrocarril.	Domicilio de la administración del ferrocarril.
		Total general.								
		Con garantía.	Sin garantía.	Total.			Decreto.	Apertura efectiva.		
		C. 4-C. 7.	C. 5-C. 8.	C. 6-C. 9.						
			Kilómetros.							
3	Midland—Continuación.									
b	Ramal Algorta a Fray Bentos	139,855.73			Junio 21/907					
	1. a Sección						Julio 30/910	Agosto 3/910		
	2. a Sección						Fbro. 21/911	Fbro. 22/911		
	3. a Sección						Julio 17/911	Julio 18/911		
c	Ramal Tres Arboles a Piedra Sola	37,477.20			Sbre. 1° 910		Abril 10/913	Abril 10/913		
4	Norte	114,155.27		114,155.27	Sbre. 14/885				F. C. Norte	Salto.
	Isla Cabellos (empalme con el F. C. Noroeste a San Eugenio)—									
	Isla Cabellos-Cuaró						Sbre. 13/890	Sbre. 17/890		
	Cuaró-San Eugenio						Abril 17/891	Abril 17/891		
5	Uruguayo del Este	114,370.30		114,370.30	Sbre. 15/884				F. C. U. del E.	Olmos.
	Olmos (empalme con el ramal Nordeste del F. C. Central) a Maldonado—									
	Empalme Olmos-La Sierra						Mayo 21/895	Mayo 25/895		
	La Sierra-Maldonado				Julio 15/908		Dbre. 13/910	Dbre. 15/910		
	Longitud total	1,709,921.89	806,604.15	2,516,526.04						
	Promedio de explotación en 30 de Junio.	1,661,762.59	805,821.60	[1] 2,467,584.19						

[1] Longitud a los efectos de la estadística excluyendo los Ramales Verdun. La Coronilla y Ramal al Cuareim k. 2,456,060.59.

TABLA Nº 1.—*Existencia de locomotoras, ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Número de orden.	Nómina de los ferrocarriles.	Existencia total. En servicio.	Existencia total. Corresponde a 10 kilómetros de vía. C. 3. / T. AC. 12	Clasificación de las locomotoras. De pasajeros. Con ténder.	De pasajeros. Sin ténder.	De pasajeros. Peso de una locomotora en término medio sin ténder. Vacía.	De pasajeros. Peso de una locomotora en término medio sin ténder. En servicio.	Mixta. Con ténder.	Mixta. Sin ténder.	Mixta. Peso de una locomotora en término medio sin ténder. Vacía.	Mixta. Peso de una locomotora en término medio sin ténder. En servicio.	De carga. Con ténder.	De carga. Sin ténder.	De carga. Peso de una locomotora en término medio sin ténder. Vacía.	De carga. Peso de una locomotora en término medio sin ténder. En servicio.	De maniobras. Sin ténder.	De maniobras. Peso de una locomotora en término medio sin ténder. Vacía.	De maniobras. Peso de una locomotora en término medio sin ténder. En servicio.	Peso de una locomotora con ténder en servicio en término medio.
		Número.	*Número.*	*Número.*	*Número.*	*Toneladas.*	*Toneladas.*	*Número.*	*Número.*	*Toneladas.*	*Toneladas.*	*Número.*	*Número.*	*Toneladas.*	*Toneladas.*	*Número.*	*Toneladas.*	*Toneladas.*	*Toneladas.*
1	Central	118	0.75	....	6	46.75	60.60	89	....	36.82	39.79	12	....	46.98	51.58	11	29.37	35.65	68.53
2	Nor-leste	17	0.96	....	....	....	....	....	14	34.88	43.00	....	....	....	....	3	22.33	26.67	40.12
3	Midland	24	0.51	....	....	....	....	18	....	35.63	38.83	....	2	32.00	38.00	4	19.25	23.75	57.21
4	Norte	5	0.44	....	....	....	....	4	....	30.00	33.00	....	....	....	....	1	26.00	32.00	52.20
5	U. del Este	7	0.61	....	....	....	....	5	....	37.00	39.48	....	2	25.32	30.50	....	....	....	58.04
	Total y término medio general	171	0.70	....	6	46.75	60.60	116	14	36.25	39.78	12	4	42.40	47.25	19	25.95	31.55	63.21

TABLA Nº 2.—*Existencia de coches de pasajeros, ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Número de orden.	Nómina de los ferrocarriles.	Existencia total.	Total de—				En término medio corresponde a 10 kilómetros de vía.				En término medio corresponde por eje.		En término medio corresponde peso propio por asiento.	Ejes, en término medio por 100,000 ejes-kilómetros.
			Ejes.	Asientos.	Camas.	Peso propio.	Coches. 10 C. 3. / T. AC. 12.	Ejes. 10 C. 4. / T. AC. 12.	Asientos. 10 C. 5. / T. AC. 12.	Peso propio. 10 C. 7. / T. AC. 12.	Asientos. C. 5. / C. 4.	Peso propio. 7. / C. 4.	C. 7. / C. 5.	100,000 C. 4. / T. 6 C. 3.
		Número.	*Número.*	*Número.*	*Número.*	*Toneladas.*	*Número.*	*Número.*	*Número.*	*Toneladas.*	*Número.*	*Toneladas.*	*Toneladas.*	*Número.*
1	Central	103	400	5,565	[1] 216	2,169	0.65	2.53	35.22	13.73	13.91	5.42	0.390	1.91
2	Nordeste	11	32	449	....	125	0.62	1.80	25.26	7.03	14.03	3.91	0.278	5.12
3	Midland	22	58	827	[2] 38	319	0.45	1.23	17.60	6.79	14.26	5.50	0.386	2.61
4	Norte	5	10	160	....	47	0.44	0.88	14.02	4.12	16.00	4.70	0.294	4.38
5	Uruguayo del Este	9	30	390	....	172	0.79	2.62	34.10	15.04	13.00	5.73	0.441	2.98
	Total y término medio general	150	530	7,391	254	2,832	0.61	2.16	30.09	11.53	13.95	5.34	0.383	2.12

[1] Figuran como 432 asientos.

[2] Figuran como 76 asientos.

TABLA N° 3.—*Existencia de furgones, ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10	11	12	13
Número de orden.	Nómina de los ferrocarriles.	Existencia total	Total de—			En término medio corresponde a 10 kilómetros de vía.				En término medio corresponde por eje—		Ejes en término medio por 100,000 ejes-kilómetros.
			Ejes.	Carga máxima.	Peso propio.	Furgones. 10 C. 3. / T. AC. 12.	Ejes. 10 C. 4. / T. AC. 12.	Carga máxima. 10 C. 5. / T. AC. 12.	Peso propio. 10 C. 6. / T. AC. 12.	Carga máxima. C. 5. / C. 4.	Peso propio. C. 6. / C. 4.	100,000 C. 4. / T. 6 C. 8.
		Número.	*Número.*	*Toneladas.*	*Toneladas.*	*Número.*	*Número.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Número.*
1	Central	91	330	725	1,195	0.58	2.09	4.59	7.56	2.20	3.62	1.45
2	Nordeste	9	26	48	81	0.56	1.46	2.70	4.56	1.85	3.11	4.55
3	Midland	14	36	....	135	0.30	0.77	....	2.87	....	3.75	1.50
4	Norte	3	6	9	22	0.26	0.53	0.79	1.93	1.50	3.67	5.12
5	Uruguayo del Este	8	20	76	70	0.70	1.75	6.65	6.12	3.80	3.50	2.33
	Total y término medio	125	418	....	1,503	0.51	1.70	....	6.12	....	3.69	1.56

TABLA Nº 4.—*Existencia de vagones de carga, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Número de orden.	Nómina de los ferrocarriles.	Existencia total.	Clasificación de los vagones.				Total de—					En término medio corresponde a 10 kilómetros de vía—				En términº medio corresponde por eje—		Ejes en término medio por 100,000 ejes kilómetros.
			Cubiertos.	Abiertos.		De animales (haciendas y Caballos).	Ejes.	Carga máxima.	Superficie.	Volumen.	Peso propio.	Vagones.	Ejes.	Carga máxima.	Peso propio.	Carga máxima.	Peso propio.	
				Cajones.	Plataformas.							10 C. 3 / T.A C.12	10 C. 8 / T.A C 12	10 C. 9 / T.A C.12	10 C. 12 / T.A C.12	C. 9 / C. 8	C. 12 / C. 8	100.000 C8 / T. 6 C.14
		Número.	*Número.*	*Número*	*Número.*	*Número.*	*No.*	*Tons.*	*Metros².*	*Metros³.*	*Tons.*	*Número.*	*Número.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Número.*
1	Central	2,151	455	709	436	551	6,446	31,605	39,732	50,183	17,491	13.61	40.81	200.03	100.70	4.90	2.71	5.56
2	Noroeste	279	92	112	27	48	714	2,398	4,216	....	1,526	15.70	40.17	134.90	85.85	3.36	2.14	11.00
3	Midland	435	110	177	38	110	1,290	6,444	8,530	....	3,892	9.26	27.46	137.18	82.85	5.00	3.02	7.33
4	Norte	153	76	77	....	....	308	1,324	2,107	....	858	13.40	26.81	115.98	75.16	4.33	2.80	17.86
5	U. del Este	175	12	115	32	16	442	2,200	2,996	2,858	1,270	15.32	38.65	192.36	111.04	4.98	2.87	20.93
	Total y término medio	3,193	745	1,190	533	725	9,200	43,971	57,581	....	25,037	13.00	37.46	179.03	101.94	4.78	2.72	6.39

TABLA Nº 5 (primera).—*Kilómetros recorridos y trabajo efectuado por las locomotoras, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14
			Kilómetros recorridos por las locomotoras.										
			En servicio de trenes:				En servicio.						
				Especiales de—									
Número de orden.	Nómina de los ferrocarriles.	Locomotoras en servicio.	Mixtos.	Pasajeros.	Carga.	Total en servicio de trenes. C. 4 a C. 6	Suplementario (máquina sola o con furgón vacío en servicio de tráfico).	De maniobras i hora = 10 kilómetros.	Trenes de inspección, auxilio, balasto, etc.	En líneas en construcción.	De otras empresas.	Total. C. 7 + 8 + 9 + 10 + 11 + 12.	En término medio por una locomotora. C. 13 / C. 3
		Número.	*Kilómetros.*	*Kilómetros.*	*Kilómetros.*	*Kilómetros.*	*Kilómetros.*	*Kilómetros.*	*Kilómetros.*	*Kilómetros.*	*Kilómetros.*		
1	Central:												
a	Extensión al norte					509,714							
b	Extensión al este					[illegible]							
c	[illegible]					179,904							
	Total y término medio					1,577,7[illegible]							
d	[illegible]					152,9[illegible]							
e	[illegible]					273,2[illegible]							
f	Central					1,75[illegible]							
	Total y término medio					[illegible]							
	Todo el sistema	118	[illegible]	232,[illegible]	1,86[illegible],572	3,617,545	97,621	[illegible]	25[illegible],723		5,424	[illegible]	[illegible]
2	Nordeste:												
a	Sección [illegible]					60,779.5							
b	Sección no [illegible]					147,002.5							
	Total y término medio	17	81,244	4,431	122,107	207,782	18,570	40,400	16,580		648	283,740	16,691
3	Midland:												
a	Línea principal		163,153	16,144	249,078	428,375	4,508	45,029	5,606			483,518	
b	Ramal Alvear-F. Berazas		77,815	5,580	26,595	109,990	1,103	8,065	1,331			120,489	
c	[illegible]		6,954	114	351	7,419	162	541	1,530			9,652	
	Total y término medio	24	247,902	21,838	276,044	545,784	5,773	53,635	8,467			613,659	25,569
4	Norte	5	49,030	1,020	8,683	58,733		11,170	1,042			70,954	14,191
5	Uruguayo del este	7	81,473	13,342	6,782	101,597	341	9,869	3,520			115,327	16,475
	Total y término medio	171	1,978,120	273,133	2,280,188	4,531,441	122,105	784,703	266,358		6,032	5,719,619	33,395

TABLA Nº 5 (continuación).—*Kilómetros recorridos y trabajo efectuado por las locomotoras, Ejercicio 1912–13.*

1	2	15	16	17	18	19	20	21	22
Número de orden.	Nómina de los ferrocarriles.	Trabajo efectuado por las locomotoras.							
		Del peso útil.					Del peso muerto.		
		Pasajeros (calculando un pasajero con su equipaje igual a 70 kilog.	Exceso de equipajes y encomiendas.	Carga.	En total.	En t° medio por un tren kilómº.	De coches.	De furgones.	De vagones.
		T. 7 C. 12x70 / 1,000	T. 8 C. 4-C. 8	T. 9 C. 10	C. 15 C. 16-C. 17	C. 18 / C. 7	T. 6 C. 3X / T. 2 C. 13	T. 6 C. 8X / T. 3 C. 12	T. 6 C. 14X / T. 4 C. 18
		Toneladas-kilómetros.	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*
1	Central								
a	Extensión al norte								
b	Extensión al este								
c	R. Nor-este Pando-Minas:								
	Total y t° medio								
d	R. Nordeste Cordón-Pando								
e	Extensión al Oeste								
f	Central								
	Total y t° medio.								
	Todo el sistema	6,738,818	3,593,410	245,388,582	255,720,810	71	113,531,016	82,511,217	314,533,364
2	Nor-oeste								
a	Sección garantizada								
b	Sección no garantizada								
	Total y t° medio	144,068	49,693	12,767,672	12,961,433	62	2,145,220	1,777,147	13,884,652
3	Midland.								
	Línea principal								
	F. Algorta-F. Bentos								
	R. 3 Árboles-P. Sola								
	Total y t° medio	555,800	297,622	29,145,171	29,998,593	55	12,224,124	9,018,172	53,148,566
4	Norte	66,783	24,539	3,660,843	3,752,165	64	1,073,433	430,410	4,796,792
5	Uruguayo del este	301,908	71,916	4,632,480	5,006,304	49	5,762,248	2,999,530	6,061,595
	Total y t° medio general	7,807,377	4,037,180	295,594,748	307,439,305	68	135,036,041	96,736,476	392,425,069

TABLA Nº 5 (conclusión).—*Kilómetros recorridos y trabajo efectuado por las locomotoras, Ejercicio 1912-13.*

1	2	23	24	25	26	27	28	29
Número de orden.	Nómina de los ferrocarriles.	Trabajo efectuado por las locomotoras.						
		Del peso muerto.				Del peso total: útil-muerto.		
		Total vehículos. C. 20-C. 21-C. 22.	De locomotoras en servicio de trenes. C. 7 X T. 1 C. 20.	Total. C. 23-C. 24.	En tº medio por un tren kilómº. C. 25 / C. 7	Excluyendo peso muerto de locomotoras. C. 18-C. 23.	Incluyendo peso muerto de locomotoras. C. 16-C. 25.	En tº medio por un tren. kilómº. C. 28 / C. 7
		Toneladas—kilómetros.	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas.*
1	Central:							
a	Extensión al Norte							
b	Extensión al este							
c	R. Noroeste (Pando-Minas)							
	Total y tº medio							
d	R. Nordeste (Cordón-Pando)							
e	Extensión al Oeste							
f	Central							
	Total y tº medio							
	Todo el sistema	510,575,597	247,910,359	758,485,956	209	766,296,407	1,014,206,766	280
2	Noroeste:							
a	Sección garantizada							
b	Sección no garantizada							
	Total y tº medio	18,107,019	8,336,214	26,443,233	127	31,068,452	39,404,666	189
3	Midland:							
	Línea principal							
	R. Algorta-F. Bentos							
	R. 3 Arboles-P. Sola							
	Total y tº medio	74,390,962	31,224,303	105,615,265	193	104,389,555	135,613,858	248
4	Norte	6,300,635	3,065,863	9,366,498	159	10,052,890	13,118,663	223
5	Uruguayo del este	14,823,373	5,896,690	20,720,063	204	19,829,677	25,726,367	253
	Total y tº medio general	621,197,586	298,433,129	920,631,015	203	931,636,891	1,228,070,320	271

TABLA Nº 5 (continuación).—*Kilómetros recorridos y trabajo efectuado por las locomotoras, Ejercicio 1912–13.*

1	2	15	16	17	18	19	20	21	22
Número de orden.	Nómina de los ferrocarriles.	Trabajo efectuado por las locomotoras.							
		Del peso útil.					Del peso muerto.		
		Pasajeros (calculando un pasajero con su equipaje igual a 70 kilog.	Exceso de equipajes y encomiendas.	Carga.	En total.	En tº medio por un tren kilómº.	De coches.	De furgones.	De vagones.
		T. 7 C. 12x70 / 1,000	T. 8 C. 4 C. 8	T. 9 C. 49	C. 15-C. 16-C. 17	C. 18 / C. 7	T. 6 C. 3X / T. 2 C. 13	T. 6 C. 8X / T. 3 C. 12	T. 6 C. 14X / T. 4 C. 18
		Toneladas—kilómetros.	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*
1	Central.								
a	Extensión al norte								
b	Extensión al este								
c	R. Noroeste (Pando-Minas)								
	Total y tº medio								
d	R. Nordeste (Cordón-Pando)								
e	Extensión al Oeste								
f	Central								
	Total y tº medio								
	Todo el sistema	6,738,818	3,593,410	245,388,582	255,720,810	71	113,531,016	82,511,217	314,533,364
2	Noroeste:								
a	Sección garantizada								
b	Sección no garantizada								
	Total y tº medio	144,068	49,693	12,767,672	12,961,433	62	2,445,220	1,777,147	13,884,652
3	Midland								
	Línea principal								
	R. Algorta-F. Bentos								
	L. 3 Árboles-P. Sola								
	Total y tº medio	555,800	297,622	29,145,171	29,998,593	55	12,224,124	9,018,172	53,148,566
4	Norte	68,783	24,539	3,660,843	3,752,165	64	1,073,433	430,410	4,796,792
5	Uruguayo del este	301,908	71,916	4,632,480	5,006,304	49	5,762,248	2,999,530	6,061,595
	Total y tº medio general	7,807,377	4,037,180	295,594,748	307,439,305	68	135,036,041	96,736,476	392,425,069

TABLA Nº 5 (conclusión).—*Kilómetros recorridos y trabajo efectuado por las locomotoras, Ejercicio 1912–13.*

1	2	23	24	25	26	27	28	29
		Trabajo efectuado por las locomotoras.						
		Del peso muerto.				Del peso total: útil-muerto.		
Número de orden.	Nómina de los ferrocarriles.	Total vehículos. C. 20-C. 21-C. 22.	De locomotoras en servicio de trenes. C. 7 X T. 1 C. 20.	Total. C. 23-C. 24.	En t° medio por un tren kilómº. C. 25 / C. 7	Excluyendo peso muerto de locomotoras. C. 18-C. 23.	Incluyendo peso muerto de locomotoras. C. 16-C. 25.	En t° medio por un tren. kilómº. C. 28 / C. 7
		Toneladas—kilómetros.	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas.*	*Toneladas—kilómetros.*	*Toneladas—kilómetros.*	*Toneladas.*
1	Central:							
a	Extensión al Norte							
b	Extensión al este							
c	R. Noroeste (Pando-Minas.)							
	Total y t° medio							
d	R. Nordeste (Cordón-Pandº)							
e	Extensión al Oeste							
f	Central							
	Total y t° medio							
	Todo el sistema	510,575,597	247,910,359	758,485,956	209	766,296,407	1,014,206,766	280
2	Noroeste:							
a	Sección garantizada							
b	Sección no garantizada							
	Total y t° medio	18,107,019	8,336,214	26,443,233	127	31,068,452	39,404,666	189
3	Midland:							
	Línea principal							
	R. Algorta-F. Bentos							
	R. 3 Árboles-P. Sola							
	Total y t° medio	74,390,962	31,224,303	105,615,265	193	104,389,555	135,613,858	248
4	Norte	6,300,635	3,065,863	9,366,498	159	10,052,800	13,118,963	223
5	Uruguayo del este	14,823,373	5,896,690	20,720,063	204	19,829,677	25,726,367	253
	Total y t° medio general	624,197,586	296,433,429	920,631,015	203	931,686,891	1,228,070,320	271

TABLA Nº 6.—*Recorrido por los ejes de vehículos, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10	11
		Coches de pasajeros.					Furgones.			
			De la C. 3 corresponde á.		En término medio.			De la C. 8 corresponde á.		
Número de orden.	Nómina de los ferrocarriles.	Total. C. 4+C. 5.	Trenes de pasajeros.	Trenes mixtos.	Por un kilóm. de vía. C. 3 : T. A C. 12.	Por eje. C. 3 : T. 2 C. 4.	Total. C. 9 a C. 11	Trenes de pasajeros.	Trenes mixtos.	Trenes de carga.
		Ejes—kilómetros.								
1	Central									
a	Extensión norte	2,512,856			6,567		2,866,066			
b	Extensión al este	3,322,708			7,023		4,373,224			
c	R. sud-este (C.-M.)	1,781,874			14,335		1,054,808			
d	R. nordeste (C.-P.)									
e	Extensión al oeste	2,186,139			6,445		2,287,018			
f	Línea central	10,942,128			34,023		11,311,458			
	Todo el sistema (total y término medio)	20,946,682	4,078,524	16,868,158	13,257	52,367	22,793,154	1,455,296	14,084,834	7,253,504
2	Noroeste									
a	Sección garantizada	196,920			2,474		192,612			
b	Sección no garantizada	428,456			4,294		378,818			
	Total y término medio	625,376	32,620	592,756	6,518	19,543	571,430	10,372	339,968	221,090
3	Midland.									
a	Línea principal	1,797,496	190,168	1,601,328	5,670		1,763,738	51,584	1,226,490	485,664
b	R. [illegible]-F. Bentos	409,292	39,696	369,596	2,928		597,824	16,316	513,526	67,982
c	R. á [illegible]-E. Sola	15,780	570	15,210	1,220		43,284	228	42,186	870
	Total y término medio	2,222,568	230,434	1,986,134	4,731	38,320	2,404,846	68,128	1,782,202	554,516
4	Norte	228,390	1,408	226,982	2,061	22,839	117,278	976	106,720	9,576
5	Uruguayo del este	1,005,628	276,042	729,586	8,793	33,521	857,008	57,820	779,300	19,888
	Total y término medio general	25,028,644	4,626,028	20,402,616	10,190	47,224	26,743,716	1,592,592	17,091,950	8,059,174

1	2	12	13	14	15	16	17	18	19	20	21
Número de orden.	Nómina de los ferrocarriles.	Furgones.		Vagones de carga.					Coches, furgones y vagones de carga.		
		En término medio.		Total.	De la C. 14 son.		En término medio.		Total.	En término medio.	
		Por un kilómetro de vía. C. 8 / T. A C. 12	Por eje. C. 8 / T. 3 C. 4.	C. 15-C. 16.	Cargados.	Vacíos.	Por un kilómetro de vía. C. 14 / T. A C. 12.	Por eje. C. 14 / T. 4 C. 8.	C. 3-C. 8-C. 14.	Por un kilómetro de vía. C. 19 / T. A C. 12.	Por eje. C. 19 / T. 2-C. 4-T. 3 C. 4-T. 4-C. 8.
1	Central:										
a	Extensión norte	9,771	....	17,903,476	....	....	61,043	....	23,284,378	79,381	....
b	Extensión al este	8,715	....	22,751,232	....	....	46,357	....	30,647,134	61,699	....
c	R. nordeste (P.-M.)	15,726	....	8,848,252	....	....	71,186	....	12,584,934	101,206	....
d	R. nordeste (C.-P.)										
e	Extensión al oeste	6,712	....	11,895,730	....	....	37,072	....	16,360,264	48,262	....
f	Línea central	35,168	....	54,663,512	....	....	109,952	....	76,548,098	239,143	....
	Todo el sistema (total y término medio)	14,426	60,070	116,163,972	80,761,266	35,302,706	73,456	18,000	159,803,308	101,139	22,263
2	Noroeste:										
a	Sección garantizada	2,400	....	1,538,127	....	....	13,165	....	1,927,659	24,019	....
b	Sección no garantizada	3,885	....	4,940,028	....	....	59,770	....	5,757,302	59,049	....
	Total y término medio	3,215	21,978	6,488,155	4,866,854	1,621,301	36,500	9,087	7,684,961	43,533	9,955
3	Midland:										
a	Línea principal	5,563	....	15,517,326	11,017,700	4,499,626	48,945	....	19,078,560	60,178	....
b	R. Algorta—F. Bentos	4,577	....	2,044,133	1,181,168	862,965	11,623	....	3,051,250	21,830	....
c	R. 3 Árboles—P. Sola	3,347	....	37,436	20,578	16,858	2,895	....	96,500	7,962	....
	Total y término medio	5,120	66,801	17,598,895	12,219,445	5,379,450	37,465	13,663	22,226,310	47,316	16,059
4	Norte	1,027	19,536	1,713,140	1,315,564	397,576	15,047	5,598	2,058,808	18,085	6,394
5	Uruguayo del este	7,493	22,850	2,112,054	1,453,332	658,722	18,467	4,778	3,973,090	34,753	5,079
	Total y término medio general	10,889	63,980	143,976,217	100,586,462	43,389,755	58,621	15,650	195,748,377	79,706	19,289

TABLA Nº 7.—*Tráfico de pasajeros, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10
		Pasajeros de primera clase.				Pasajeros de segunda clase.			
Número de orden.	Nómina de los ferrocarriles.	Trasportados en total.	Recorrido kilométrico.	En % del número total $\frac{100\times C.6}{C.11}$	Recorrido medio de un pasajero $\frac{C.4}{C.5}$	Trasportados en total.	Recorrido kilométrico.	En % del número total $\frac{100\times C.7}{C.11}$	Recorrido medio de un pasajero $\frac{C.6}{C.7}$
		Número.	*Pasajero-k.*	%	*Kilóms.*	*Número.*	*Pasajero-k.*	%	*Kilóms.*
1	Central:								
a	Extensión norte	36.734	....	60.17	....	24.511½	....	39.83	....
b	Extensión este	69.451½	....	50.07	....	69.241	....	49.93	....
c	R. Nordeste (P. M.)	45.484½	....	41.71	....	63.560	....	58.29	....
d	R. Nordeste (C. P.)	115.496½	....	46.08	....	135.122	....	53.92	....
e	Extensión al oeste	43.584½	....	49.21	....	44.983½	....	50.79	....
f	Línea Central	738.946½	....	50.93	....	712.078	....	49.07	....
	Todo el sistema	1,049.676½	....	50.01	....	1,049.296	....	49.99	....
	Total y tº medio	812.956	56,632.655	49.03	70	845.030	39,636.169	50.97	47
2	Noroeste	18.516	1,303,315	63.16	70	10.806½	754.796	36.85	70
3	Midland	37.175½	4,971.619	48.14	134	40.051½	2,968.374	51.86	74
4	Norte	8.869½	608.101	68.63	69	4.054	345.938	31.37	85
5	Uruguayo del este	29.246	2,363.823	48.14	80	31.508	1,949.152	51.86	62
	Total y tº medio general	906.763	65,879.513	49.33	73	931.450	45,654.429	50.67	49

1	2	11	12	13	14	15	16	17
		Pasajeros trasportados en total.						
				En término medio.				
Número de orden.	Nómina de los ferrocarriles.	Trasportados en total.	Recorrido kilométrico.	Recorrido medio de un pasajero.	Pasajeros por kilómetro de vía.	Pasajeros por kilómetro de vía.	Recorrido medio en relación a la longitud de la vía.	Por un eje-kilómetro de coche.
		C. 3–C. 7	C. 4–C. 8	C. 12 / C. 11	C. 11 / T. A. C. 12	C. 12 / T. A. C. 12	100 C. 13 / T. A. C. 12	C. 12 / T. 6 C. 3
		Número.	*Pasajero-k.*	*Kiloms.*	*Número.*	*Número.*	%	*Número.*
1	Central:							
a	Extensión norte	61.045½			208			
b	Extensión este	138.672½			276			
c	R. Nordeste (P.-M.)	109.044½			1.235			
d	R. Nordeste (C.-P.)	250.618½			6.965			
e	Extensión al Oeste	88.568			261			
f	Línea Central	1,451.023½			4.511			
	Todo el sistema	2,098.972½						
	Total y t° medio	1,657.986	96,268.824	58	1.019	60.928	4	4.60
2	Noroeste	29.322½	2,058.111	70	165	11.578	39	3.29
3	Midland	77.227	7,939.993	103	164	16.903	22	3.57
4	Norte	12.923½	954.039	74	113	8.357	65	4.18
5	Uruguayo del este	60.754	4,312.975	71	531	37.711	62	4.29
	Total y t° medio general	1,838.213	111,533.912	61	748	45.412	2	4.46

TABLA N° 8.—*Tráfico de encomiendas y equipajes, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10
		Encomiendas.				Equipajes.			
Número de orden.	Nómina de los farrocarriles.	Cantidad trasportada.	Recorrido kilométrico.	Por un kilómetro de vía. $\frac{C.4}{T.A.C.12}$	Recorrido medio de una tonelada. $\frac{C.4}{C.3}$	Cantidad trasportada.	Recorrido kilométrico.	Por un kilómetro de vía. $\frac{C.8}{T.A.C.12}$	Recorrido medio de una tonelada. $\frac{C.8}{C.7}$
		Toneladas.	*Toneladas.*	*Kilómetros.*	*Kilómetros.*	*Toneladas.*	*Toneladas.*	*Kilómetros.*	*Toneladas.*
1	Central	32,961,000	2,841,926	1,799	86	4,657,000	751,484	476	161
2	Noroeste	455,990	44,247	249	97	58,360	5,446	31	93
3	Midland	1,351,300	211,073	449	158	641,880	85,549	184	135
4	Norte	221,192	22,733	199	103	18,365	1,806	16	98
5	Uruguayo del este	577,143	39,355	344	68	101,930	32,561	285	81
	Total y término medio general	35,566,625	3,159,334	1,286	89	5,777,336	877,846	357	152

TABLA Nº 9 (primera).—*Tráfico de cargas, Ejercicio 1912–13.*

DESCRIPCIÓN DE LA CARGA.

1	2	3	4	5	6	7	8	9	10	11
		Frutos del país (toneladas).								
					Cereales.					
Número de orden.	Nómina de los ferrocarriles.	Lana y cueros lanares.	Cerda.	Cueros vacunos y yeguarizos.	Trigo.	Maíz.	Lino.	Varios.	Total. C.6 á C.9	Pasto y alfalfa.
1	Central:									
a	Extensión norte	10,890	200	5,447	71	3,493	1	1,129	4,694	2,861
b	Extensión este	18,859	53	1,025	10,460	16,810	514	3,349	40,133	3,374
c	R. Nordeste (P. a M.)	5,731	16	423	27,051	13,383	136	3,260	43,830	4,068
d	R. Nordeste (C. a P.)	24,580	66	1,427	42,386	28,407	657	5,973	77,423	18,086
e	Extensión Seste	6,963	14	473	37,724	6,360	9,591	1,897	55,572	2,340
f	Línea Central	61,306	385	9,230	95,820	40,503	10,344	12,446	159,213	17,606
	Todo el sistema (total y tº medio)	128,329 64,834	734 389	18,025 9,477	222,512 105,207	109,056 46,247	21,243 14,065	28,054 14,304	380,865 179,823	48,335 26,273
2	Noroeste	7,661	66	1,232	93	1,304	8	672	2,077	1,122
3	Midland	12,358	136	1,499	357	916	667	879	2,819	8,087
4	Norte	3,950	19	263	13	723	....	283	1,019	419
5	U. del este	2,657	7	229	6,710	1,486	9	1,303	9,508	1,400
	Total y término medio general	91,460	617	12,700	112,380	50,576	14,749	17,441	95,245	371,301

TABLA N° 9 (primera).—*Tráfico de cargas, Ejercicio 1912-13*—Continuación.

DESCRIPCIÓN DE LA CARGA—Continuación.

1	2	12	13	14	15	16	17	18	19	20	21
		Frutos del país (toneladas).						Materiales de construcción (toneladas).			
Número de orden.	Nómina de los ferrocarriles.	Harina.	Huesos y astas.	Afrecho.	Varios.	Total. C. 3 a C. 5-C. 10 a C. 15	En % de la carga total. 100×16 / C. 48	Postes.	Alambre.	Ladrillos.	Madera.
							%				
1	Central:										
a	Extensión norte	5,499	1,136	1,919	.....	32,646	16.31	1,831	1,093	449	3,398
b	Extensión este	5,887	50	4,070	.....	73,451	33.79	3,017	1,673	1,310	5,696
c	R. Nordeste (P. a M.)	1,865	48	1,790	.....	57,771	24.63	1,015	632	490	4,373
d	R. Nordeste (C. a P.)	2,355	106	3,778	.....	127,821	23.11	3,944	2,256	2,404	10,067
e	Extensión Seste	2,107	289	1,158	.....	58,916	33.88	1,278	595	1,333	4,127
f	Línea Central	11,467	1,771	9,214	.....	270,192	23.94	8,834	5,552	3,508	22,000
	Todo el sistema (total y t° medio)	29,180	3,400	21,929	.....	630,797	24.86	19,919	11,801	9,494	49,681
		18,939	1,773	13,262	.....	314,770	23.74	10,447	5,799	6,936	25,328
2	Noroeste	5,895	154	246	38,034	56,487	49.89	1,309	1,160	7	1,662
3	Midland	1,480	467	803	22,115	49,764	25.71	2,613	1,360	547	3,589
4	Norte	1,666	63	150	16,733	24,282	66.01	639	395	11	973
5	C. del este	507	26	497	2,312	17,143	23.53	386	288	129	1,577
	Total y término medio general	28,487	2,483	14,958	79,194	462,446	26.54	15,394	9,002	7,730	33,129

TABLA Nº 9 (segunda).—*Tráfico de cargas, Ejercicio 1912-13.*

DESCRIPCIÓN DE LA CARGA.

1	2	22	23	24	25	26	27	28	29	30
		Materiales de construcción.								
Número de orden.	Nómina de los ferrocarriles.	Cemento y cal.	Piedra.	Piedra cal.	Arena.	Varios.	Total. C. 18 a C. 26	En % de la carga total. $\frac{100 \times 27}{C.48}$	Mercancías generales.	En % de la carga total. $\frac{100\ C.29}{C.48}$
1	Central:	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	%	*Tons.*	%
a	Extensión norte	2,973	308	289	2,491	3,860	16,782	8.38	63,618	31.79
b	Extensión este	3,014	258	1,598	3,396	2,220	22,182	10.21	50,108	23.05
c	R. Nordeste (P. a M.)	2,086	1,722	105,208	1,860	2,711	120,097	51.21	33,929	14.47
d	R. Nordeste (C. a P.)	5,721	3,983	103,433	112,013	6,335	250,176	45.23	86,076	15.56
e	Extensión Oeste	1,950	32,131	808	659	2,368	45,249	22.24	34,364	16.89
f	Línea Central	20,504	29,366	44,965	135,287	20,169	290,185	25.72	242,772	21.51
	Todo el sistema (total y tº medio)	36,248	67,858	256,301	255,706	37,663	744,671	29.35	510,867	20.14
		22,209	55,386	107,124	141,744	21,452	396,425	29.89	266,768	20.12
2	Noroeste	1,802	523	6	919	2,270	9,658	8.53	16,570	14.63
3	Midland	3,553	3,734	1,854	802	....	18,152	9.38	38,906	20.10
4	Norte	734	54	....	125	659	3,590	9.76	6,820	18.54
5	U. del este	1,379	269	32,544	1,636	1,338	39,546	54.28	13,462	18.48
	Total y término medio general	29,677	59,966	141,528	145,226	25,719	467,371	26.82	342,526	19.66

TABLA N° 9 (segunda).—*Tráfico de cargas, Ejercicio 1912-13*—Continuación.

DESCRIPCIÓN DE LA CARGA—Continuación.

		31	32	33	34	35	36	37	38	39
Número de orden.	Nómina de los ferrocarriles.	Carbón de piedra.	En % de la carga total. 100 C. 31 / C. 48	Vehículos.	En % de la carga total. 100 C. 33 / C. 48	Materiales de la compañía.	En % de la carga total. 100×35 / C. 48	En total. C. 16-C. 27-C. 29-C. 31-C. 33-C. 35	En % de la carga total. 100 C. 37 / C. 48	Recorrido kilométrico.
		Tons.	%	*Tons.*	%	*Tons.*	%	*Toneladas.*	%	*Tons kilóm.*
1	Central:									
a	Extensión norte	40,442	20.21	135	0.07	6,397	3.20	160,020	79.96	....
b	Extensión este	2,820	1.30	205	.10	9,637	4.43	158,403	72.88	....
c	R. nordeste (P. a M.)	3,678	1.57	98	.04	4,198	1.79	219,771	93.71	....
d	R. nordeste (C. a P.)	6,843	1.24	254	.04	15,151	2.74	486,321	87.92	....
e	Extensión oeste	1,034	0.51	260	.13	5,160	2.54	154,983	76.19	....
f	Línea Central	61,164	5.42	799	.07	79,325	7.03	944,437	83.69	....
	Todo el sistema (total y t° medio)	115,981	4.57	1,751	.07	119,868	4.73	2,123,935	83.72	....
		60,556	4.57	958	.07	87,715	6.61	1,127,192	85.00	197,807,080
2	Noroeste	....	....	57	.05	[1] 11,422	10.09	94,194	83.19	10,975,990
3	Midland	10,455	5.40	329	.17	[1] 28,182	13.53	143,788	74.29	22,747,660
4	Norte	....	....	13	.03	[1] 1,193	3.24	35,898	97.58	3,583,140
5	U. del este	....	....	57	.08	....	....	70,208	96.37	4,446,598
	Total y término medio general	71,011	4.08	1,414	.08	126,512	7.26	1,471,280	84.44	239,560,468

[1] Incluídos materiales de otras compañías.

TABLA Nº 9 (conclusión).—*Tráfico de cargas, Ejercicio 1912–13.*

DESCRIPCIÓN DE LA CARGA.

1	2	40	41	42	43	44	45	46	47
		Animales.							
Número de orden.	Nómina de los ferrocarriles.	Caballar.	Ovino.	Vacuno.	Porcino.	Total. C. 40 a C. 43	Peso.	En % de la carga total. 100 C. 45 / C. 49	Recorrido kilométrico.
		Número.	*Número.*	*Número.*	*Número.*	*Número.*	*Toneladas.*	*%*	*Tons-kilo.*
1	**Central:**								
a	Extensión norte	2,719	225,311	81,667	105	309,802	40,116	20.04	....
b	Extensión este	3,001	253,418	125,152	5,415	386,986	58,956	27.12	....
c	R. Nordeste (P. a M.)	864	21,560	30,303	17,550	70,277	14,739	6.29	....
d	R. Nordeste (C. a P.)	3,088	192,689	144,988	22,526	363,291	66,799	12.08	....
e	Extensión oeste	3,473	231,334	101,441	430	336,678	48,428	23.81	....
f	Línea Central	10,805	753,006	396,750	791	1,161,352	184,070	16.31	....
	Todo el sistema	23,950	1,677.318	880,301	46,817	2,628,386	413,108	16.28	....
	Total y t. medio	13,087	893,461	415,909	23,939	1,346,396	198,831	15.00	47,581,502
2	Noroeste	877	77,390	41,153	283	119,703	19,030	16.81	1,791,682
3	Midland	2,994	251,077	97,318	292	351,681	49,748	25.71	6,397,511
4	Norte	158	15,462	959	24	16,603	889	2.42	77,703
5	U. del este	461	6,802	5,127	2,767	15,157	2,647	3.63	185,882
	Total y término medio general	17,577	1,244,192	560,466	27,305	1,849,540	271,145	15.56	56,034,280

TABLA N°. 9 (conclusión).—*Tráfico de cargas, Ejercicio 1912–13.*

DESCRIPCIÓN DE LA CARGA.

Número de orden.	Nómina de los ferrocarriles.	48	49	50	51	52	53	54
				En término medio.				
		Carga total.	Recorrido kilométrico.	Por 1 kilómetro de vía:		Recorrido medio de una tonelada.	Recorrido medio en relación a la longitud de la vía.	Por un eje kilómetro de vagón.
		C. 37–C. 45	C. 39–C. 47	C. 48 / T. A. C. 12	C. 49 / T. A. C. 12	C. 49 / C. 48	100 C. 52 / T. A. C. 12	C. 49¹ / T. 6 C. 14
		Toneladas.	*Tons.-kilóm.*	*Toneladas.*	*Ton.-kil.*	*Kilóm.*	%	*Toneladas.*
1	Central:							
a	Extensión norte	200,136		682				
b	Extensión este	217,359		433				
c	R. Nordeste (P. a M.)	234,510		2,655				
d	R. Nordeste (C. a P.)	553,120		15,372				
e	Extensión oeste	203,411		600				
f	Línea Central	1,128,507		3,509				
	Todo el sistema	2,537,043						
	Total y t. medio	1,326,023	245,388,582	839	155,306	185	12	2.11
2	Noroeste	113,224	12,767,672	637	71,827	113	64	1.97
3	Midland	193,536	29,145,171	412	62,045	150	32	1.66
4	Norte	36,787	3,660,843	322	32,069	100	88	2.14
5	U. del este	72,855	4,632,480	637	40,504	64	56	2.19
	Total y término medio general	1,742,425	295,594,748	709	120,353	170	7	2.05

TABLA Nº 10 (primera).—*Productos de explotación, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10
		Pasajeros.							
		Primera clase.		Segunda clase.		Total.			
							En término medio por—		
Número de orden.	Nómina de los ferrocarriles.	Total.	Por un pasajero kilómetro. C. 3 / T. 7–C. 4	Total.	Por un pasajero kilómetro. C. 5 / T. 7–C. 8	C. 3–C. 5	Un kilómetro de vía. C. 7 / T. A. C. 12	Un pasajero kilómetro. C. 7 / T. 7–C. 12	Ciento del producto total. 100 C. 7 / C. 42
		Pesos.	*Centésimos.*	*Pesos.*	*Centésimos.*	*Pesos.*	*Pesos.*	*Centésimos.*	*Por ciento.*
1	Central:								
a	Extensión norte	115,593.73	....	49,021.36	....	164,615.09	561.20	....	23.80
b	Extensión este	216,869.43	....	109,347.35	....	326,216.78	650.36	....	27.58
c	R. Nordeste (P. M.)	37,227.19	....	36,317.18	....	73,544.37	832.73	....	24.47
	Total y término medio	369,690.35	....	194,685.89	....	564,376.24	638.99	....	25.95
d	R. Nordeste (C. P.)	40,529.79	....	34,062.91	....	74,592.70	2,073.00	....	29.30
e	Extensión oeste	93,636.04	....	61,625.70	....	155,261.74	457.76	....	31.05
f	Línea Central	520,027.54	....	300,895.63	....	820,923.17	2,552.30	....	28.17
	Total y término medio	654,193.37	....	396,584.24	....	1,050,777.61	1,508.01	....	28.64
	Todo el sistema (total y término medio)	1,023,883.72	1.81	591,270.13	1.49	1,615,153.85	1,022.23	1.68	27.64
2	Noroeste	49,172.22	3.77	21,469.45	2.84	70,641.67	397.41	3.43	19.50
3	Midland	114,721.90	2.31	57,129.06	1.92	171,850.96	365.84	2.16	26.82
4	Norte	23,708.24	3.90	10,757.70	3.11	34,465.94	301.92	3.61	24.75
5	Uruguayo del este	45,381.50	1.92	28,742.09	1.47	74,123.59	648.10	1.72	38.36
	Total y término medio general	1,256,867.58	1.91	709,368.43	1.55	1,966,236.01	800.56	1.76	27.39

TABLA Nº 10 (primera).—*Productos de explotación, Ejercicio 1912-13*—Continuación.

Número de orden.	Nómina de los ferrocarriles.	11	12	13	14	15	16
		Exceso de equipaje.			Encomiendas.		
		Total.	En término medio por— Un kilómetro de vía. C. 11 / T. A. C. 12	En término medio por— Ciento del producto total. 100 C. 11 / C. 42	Total.	En término medio por— Un kilómetro de vía. C. 14 / T. A. C. 12	En término medio por— Ciento del producto total. 100 C. 14 / C. 42
		Pesos.	*Pesos.*	*Por ciento.*	*Pesos.*	*Pesos.*	*Por ciento.*
1	Central:						
a	Extensión norte	3,215.60	10.96	0.46	16,346.48	55.72	2.36
b	Extensión este	5,476.43	10.92	0.46	43,290.10	86.30	3.66
c	R. Nordeste (P. M.)	917.64	10.39	0.31	13,939.32	156.70	4.60
	Total y término medio	9,609.67	10.88	0.44	73,475.90	83.19	3.38
d	R. Nordeste (C. P.)	1,199.28	33.33	0.47	16,038.21	445.71	6.30
e	Extensión oeste	2,558.40	7.54	0.51	21,774.52	64.20	4.35
f	Línea Central	11,405.82	35.46	0.39	161,289.92	501.46	5.54
	Total y término medio	15,163.50	21.76	0.41	199,102.65	285.74	5.43
	Todo el sistema (total y término medio)	24,773.17	13.68	0.42	272,578.55	172.51	4.67
2	Noroeste	1,433.07	8.06	0.39	8,250.29	46.41	2.28
3	Midland	3,510.31	7.47	0.55	25,124.78	53.49	3.92
4	Norte	487.40	4.27	0.35	3,267.13	28.62	2.35
5	Uruguayo del este	1,714.31	14.99	0.89	7,153.00	62.54	3.70
	Total y término medio general	31,918.26	13.00	0.44	316,373.75	128.81	4.41

TABLA N° 10 (segunda).—*Productos de explotación, Ejercicio 1912–13.*

CARGA.

1	2	17	18	19	20	21	22	23	24	25	26	27
		Carga.			Animales.			Total.				
			En término medio por—			En término medio por—			En término medio por—			
Número de orden.	Nómina de los ferrocarriles.	Total.	Una tonelada de carga. C. 17 / T. 9 C. 37	Una tonelada kilométrica. C. 17 / T. 9 C. 39	Total.	Una tonelada de carga. C. 20 / T. 9 C. 45	Una tonelada kilométrica. C. 20 / T. 9 C. 47	C. 17—C. 20.	Un kilómetro de vía. C. 23 / T. 9 C. 12	Una tonelada de carga. C. 23 / T. 9 C. 48	Una tonelada kilométrica. C. 23 / T. 9 C. 49	En % del producto total. 100 × C. 23 / C. 42
		Pesos.	*Pesos.*	*Centésimos.*	*Pesos.*	*Pesos.*	*Centésimos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Centésimos.*	%
1	Central:											
a	Extensión norte	448, 739. 94	2. 80		55, 805. 92	1. 39		504, 545. 86	1, 720. 09	2. 52		72. 96
b	Extensión este	645, 656. 69	4. 08		149, 381. 49	2. 53		795, 038. 18	1, 585. 02	3. 66		67. 20
c	R. Nordeste (P.-M.)	195, 461. 62	0. 89		13, 740. 75	0. 93		209, 202. 37	2, 368. 76	0. 89		69. 60
	Total y t° medio	1, 289, 858. 25			218, 928. 16			1, 508, 786. 41	1, 708. 24			69. 36
d	R. Nordeste (C.-P.)	144, 959. 18	0. 30		11, 930. 59	0. 18		156, 889. 77	4, 360. 11	0. 28		61. 62
e	Extensión oeste	229, 190. 78	1. 48		81, 166. 30	1. 68		310, 357. 08	915. 04	1. 53		62. 07
f	Línea central	1, 479, 035. 55	1. 57		273, 542. 58	1. 49		1, 752, 578. 13	5, 448. 88	1. 55		60. 14
	Total y t° medio	1, 853, 185. 51			366, 639. 47			2, 219, 824. 98	3, 185. 75			60. 51
	Todo el sistema (total y t° medio)	3, 143, 043. 76	2. 79	1. 59	585, 567. 63	2. 95	1. 23	3, 728, 611. 39	2, 359. 83	2. 81	1. 52	63. 80
2	Noroeste	237, 676. 00	2. 52	2. 17	29, 475. 82	1. 55	1. 65	267, 151. 82	1, 502. 90	2. 36	2. 09	73. 73
3	Midland	300, 140. 21	2. 09	1. 32	92, 709. 77	1. 86	1. 44	392, 849. 98	836. 31	2. 03	1. 35	61. 31
4	Norte	91, 810. 48	2. 56	2. 56	2, 386. 34	2. 68	3. 07	94, 196. 74	825. 16	2. 56	2. 57	67. 65
5	Uruguayo del este	97, 087. 52	1. 38	2. 18	4, 050. 55	1. 53	2. 18	101, 138. 07	884. 30	1. 39	2. 18	52. 34
	Total y término medio general	3, 869, 757. 80	2. 63	1. 62	714, 190. 11	2. 63	1. 27	4, 583, 948. 00	1, 866. 38	2. 63	1. 55	63. 85

TABLA N° 10 (tercera).—*Productos de explotación, Ejercicio 1912–13.*

1	2	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Número de orden.	Nómina de los ferrocarriles.	Telégrafo.		Trenes especiales.		Muellaje.		Almacenaje.		Arrendamientos.		Alq. de tren rodante.		Varios.	
		Total.	En % del producto total. 100 C. 28 / C. 42	Total.	En % del producto total. 100 C. 30 / C. 42	Total.	En % del producto total. 100 C. 32 / C. 42	Total.	En % del producto total. 100 C. 34 / C. 42	Total.	En % del producto total. 100 C. 36 / C. 42	Total.	En % del producto total. 100 C. 38 / C. 42	Total.	En % del producto total. 100 C. 40 / C. 42
		Pesos.	%	*Pesos.*	%	*Pesos.*	%	*Pesos.*	%	*Pesos.*	%	*Pesos.*	%	*Pesos.*	%
1	Central:														
a	Extensión norte	1,699.64	2.25	726.90	0.11					422.75	0.06				
b	Extensión este	7,133.41	0.60	4,678.22	0.49					1,272.46	0.10				
c	R. Nordeste (P.—M.)	691.61	0.23	1,331.45	0.44					1,056.26	0.35				
	Total y t° medio	9,524.66	0.44	6,736.57	0.31					2,691.47	0.12				
d	R. Nordeste (C.—P.)	867.00	0.34	807.93	0.32			2,857.70	1.12	1,340.50	0.53				
e	Extensión oeste	3,531.86	0.71	5,503.77	1.10					1,065.82	0.21				
f	Linea Central	7,867.52	0.27	13,747.84	0.47	21,230.89	0.73	7,821.33	0.27	12,260.92	0.42	11,692.07	0.40	93,370.67	3.20
	Total y t° medio	12,266.38	0.34	20,059.54	0.55	21,230.89	0.58	10,679.03	0.29	14,667.24	0.40	11,692.07	0.31	93,370.67	2.54
	Todo el sistema, total y t° medio	21,791.04	0.37	26,796.11	0.46	21,230.89	0.36	10,679.03	0.18	17,358.71	0.30	11,692.07	0.20	93,370.67	1.60
2	[illegible]	2,654.15	1.[illegible]	2,282.61	0.63	1,024.02	0.28			873.00	0.24	3,779.75	1.04	3,259.91	0.90
3	[illegible]	5,391.98	0.84	5,972.41	0.93	16,132.31	2.52					19,215.56	3.00	687.63	0.11
4	[illegible]	1,062.41	0.76	764.35	0.55	2,391.18	1.66			156.00	0.11	2,483.99	1.78	50.36	0.04
5	[illegible]	533.37	0.28							2,526.40	1.33	6,042.69	3.12		
	Total y término medio general	32,437.90	0.45	35,814.86	0.51	40,681.40	0.57	10,679.03	0.15	20,920.11	0.29	43,123.07	0.60	97,368.57	1.35

Tabla Nº 10 (conclusión).—*Productos de explotación, Ejercicio 1912–13.*

TOTAL DE LOS PRODUCTOS DE EXPLOTACIÓN.

1	2	42	43	44	45	46	47	48	49	50	51
				En término medio por 1,000—					En por ciento—		
Número de orden.	Nómina de los ferrocarriles.	Total.	En término medio por un kilómetro de vía.	Kilómetros de locomotora.	Kilómetros de tren.	Ejes kilómetros de vehículos.	Toneladas kilómetros de peso útil.	Toneladas kilómetros de peso bruto sin locomotora.	De los gastos.	Del capital garantizado.	Del capital realizado.
		C. 7–C. 11–C. 14–C. 23–C. 28–C. 30–C. 32–C. 34–C. 36–C. 38–C. 40.	C. 42 / T. A. C. 12	C. 42 / T. 5 C. 13	C. 42 / T. 5 C. 7	C. 42 / T. 6 C. 19	C. 42 / T. 6 C. 18	C. 42 / T. 5 C. 27	100 C. 42 / T. 11 C. 48	100 C. 42 / T. 12 C. 5	100 C. 42 / T. 12 C. 3
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
1	Central:										
a	Extensión norte	691,572.32	2,357.70	....	1,356.65	29.70	....	....	[1] 191	10.03	8.74
b	Extensión este	1,183,045.58	2,358.56	....	1,695.01	38.60	....	....	[1] 190	10.04	8.70
c	R. Nordeste (P. M.)	300,583.02	3,403.46	....	1,768.20	....	....	....	[1] 199	14.48	....
	Total y término medio	2,175,200.92	2,462.76	....	1,578.85	....	....	....	192	10.48	....
d	R. Nordeste (C.-P.)	254,593.09	7,075.37	....	1,915.13	....	....	....	(1)	....	....
e	Extensión Oeste	500,053.19	1,474.32	....	1,339.66	30.55	....	....	(1)	....	....
f	Línea Central	2,914,098.28	9,060.12	....	1,680.93	37.89	....	....	(1)	....	....
	Total y término medio	3,668,744.56	5,265.15	....	1,637.96	....	....	....	[1] 183	....	[2] 14.87
	Todo el sistema en total y término medio	5,843,945.48	3,698.61	1,263.03	1,615.45	36.57	22.85	7.62	186	10.48	12.12
2	Nordeste	362,345.69	2,038.43	1,277.01	1,743.87	47.15	27.96	11.66	147	8.67	5.25
3	Midland	640,737.67	1,364.02	1,044.13	1,173.98	28.83	21.36	6.14	143	5.65	5.56
4	Norte	139,237.49	1,219.72	1,962.36	2,370.69	67.63	37.11	13.85	156	5.19	3.54
5	Uruguayo del Este	193,234.43	1,689.55	1,675.54	1,901.97	48.62	38.60	9.74	126	7.19	6.19
	Total y término medio general	7,179,500.96	2,923.18	1,257.22	1,584.37	36.68	23.35	7.71	176	9.74	8.48

[1] Véanse gastos en tabla número 12.

[2] Incluyendo Ramal Nordeste (Pando-Minas).

Tabla Nº 11 (primera).—*Gastos de explotación, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8
		Vía y obras.				Locomotoras.	
				En %.			
Número de orden.	Nómina de los ferrocarriles.	Total.	En término medio por un kilómetro de vía. C. 3 / T. A. C. 12	De las entradas. 100 C. 3 / T. 10 C. 42	De los gastos. 100 C. 3 / C. 48	Total.	En término medio por un kilómetro de vía. C. 7 / T. A. C. 12
		Pesos.	*Pesos.*	%	%	*Pesos.*	*Pesos.*
1	Central (todo el sistema)	868,561.72	549.71	14.86	27.62	974,419.67	616.71
2	Noroeste	79,111.40	445.05	21.84	32.03	75,810.67	426.48
3	Midland	121,801.41	259.29	19.01	27.15	151,343.73	322.19
4	Norte	28,969.63	253.77	20.81	32.45	25,782.61	225.86
5	U. del este	62,054.61	542.58	32.11	40.34	34,443.05	301.15
	Total y tº medio	1,160,498.77	472.50	16.16	28.42	1,261,799.73	513.75

Número de orden.	Nómina de los ferrocarriles.	9	10	11	12	13	14	15	16	17	18
		Locomotoras.						Telégrafo.			
		En término medio por 1,000—				En %.				En %.	
		Kilómetros de locomotoras. C. 7 / T. 5 C. 13	Ejes-kilómetro de vehículos. C. 7 / T. 5 C. 19	Toneladas-kilómetro de peso útil. C. 7 / T. 5 C. 18	Toneladas-kilómetro de peso bruto. C. 7 / T. 5 C. 27	De las entradas. 100 C. 7 / T. 10 C. 42	De los gastos. 100 C. 7 / C. 48	Total.	En término medio por un kilómetro de vía. C. 15 / T. A. C. 12	De las entradas. 100 C. 15 / T. 10 C. 42	De los gastos. 100 C. 15 / C. 48
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	%	%	*Pesos.*	*Pesos.*	%	%
1	Central (todo el sistema)	210.60	6.10	3.81	1.27	16.67	30.99	20,570.27	13.02	0.35	0.65
2	Noroeste	267.18	9.86	5.85	2.44	20.92	30.70	2,723.30	15.32	0.73	1.10
3	Midland	246.63	6.81	5.04	1.55	23.62	33.73	3,350.41	7.13	0.52	0.75
4	Norte	363.37	12.52	6.87	2.56	18.52	28.88	344.92	3.02	0.25	0.39
5	C. del este	298.66	8.67	6.88	1.74	17.83	22.39	824.18	7.21	0.43	0.54
	Total y tº medio	220.96	6.45	4.10	1.35	17.58	30.90	27,813.08	11.32	0.39	0.68

TABLA Nº 11 (segunda).—*Gastos de explotación, Ejercicio 1912–13.*

1	2	19	20	21	22	23	24	25	26	27	28	29	30	31
Número de orden.	Nómina de los ferrocarriles.	Tren rodante.							Tráfico.					
		Total.	En término medio por un kilómetro de vía.	En término medio por 1,000—			En %.		Total.	En término medio por un kilómetro de vía.	En término medio por 1,000—			
				Ejes-kilómetro de vehículos	Toneladas-kilómetro de peso útil.	Toneladas-kilómetro de peso bruto.	De las entradas.	De los gastos.			Kilómetros de locomotoras.	Ejes-kilómetro de vehículos.	Toneladas-kilómetro de peso útil.	Toneladas-kilómetro de peso bruto.
			C. 19 / T. A C. 12	C. 19 / T. 6 C. 19	C. 19 / T. 5 C. 12	C. 19 / T. 5 C. 27	100 C. 19 / T. 10 C. 42	100 C. 19 / C. 48	•	C. 26 / T. A. C. 12	C. 26 / T. 5 C. 13	C. 26 / T. 6 C. 19	C. 26 / T. 5 C. 18	C. 26 / T. 5 C. 27
		Pesos.	*Pesos.*	*Pesos*	*Pesos.*	*Pesos.*	%	%	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
1	Central (todo el sistema).	158,106.27	100.06	0.99	0.62	0.21	2.71	5.03	762,331.33	483.11	164.98	4.78	2.90	1.00
2	Noroeste	16,968.69	95.46	2.21	1.31	0.55	4.68	6.87	45,058.41	253.48	158.80	5.86	3.48	1.46
3	Midland	18,452.52	39.28	0.83	0.61	0.18	2.88	4.11	85,747.90	182.54	139.73	3.86	2.86	0.82
4	Norte	3,006.34	26.34	1.46	0.80	0.30	2.16	3.37	16,312.31	142.90	229.89	7.92	4.35	1.62
5	Uruguayo del este	10,217.92	89.60	2.58	2.05	0.52	5.30	6.66	24,467.14	213.93	212.15	6.16	4.89	1.23
	Total y t° medio	206,751.74	84.19	1.06	0.67	0.22	2.88	5.06	934,917.09	380.66	163.72	4.78	3.04	1.00

Número de orden.	Nómina de los ferrocarriles.	32	33	34	35	36	37	38	39	40	41
		Tráfico.		Gastos generales.							
		En %.				En término medio por 1,000—				En %.	
		De las entradas.	De los gastos.	Total.	En término medio por un kilómetro de vía.	Kilómetros de locomotoras.	Ejes kilómetro de vehículos.	Toneladas-kilómetro de peso útil.	Toneladas-kilómetro de peso bruto.	De las entradas.	De los gastos.
		100 C. 26 T. 10 C. 42	100 C. 26 C. 48		C. 34 T. 4 C. 12	C. 34 T. 5 C. 13	C. 34 T. 6 C. 19	C. 34 T. 5 C. 18	C. 34 T. 5 C. 27	100 C. 34 T. 10 C. 42	100 C. 34 C. 48
		%	%	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	%	%
1	Central (todo el sistema)	13.06	24.28	243,551.65	154.14	52.64	1.52	0.95	0.32	4.17	7.75
2	Noroeste	12.44	18.25	27,292.12	153.54	96.19	3.55	2.11	0.88	7.53	11.05
3	Midland	13.38	19.11	53,844.37	111.63	87.74	2.12	1.79	0.52	8.41	12.00
4	Norte	11.71	18.28	14,830.20	129.91	209.01	7.20	3.05	1.48	10.65	16.61
5	Uruguayo del este	12.66	15.90	21,793.24	190.55	188.97	5.48	4.35	1.10	11.28	14.17
	Total y t° medio	13.02	22.90	361,311.58	147.11	63.27	1.85	1.18	0.39	5.03	8.85

TABLA Nº 11 (conclusión).—*Gastos de explotación, Ejercicio 1912–13.*

1	2	42	43	44	45	46	47
Número de orden.	Nómina de los ferrocarriles.	Alquiler de tren rodante.			Varios.		
		Total.	En %. De las entradas. $\frac{100\ C.42}{T.10\ C.42}$	En %. De los gastos. $\frac{100\ C.42}{C.48}$	Total.	En %. De las entradas. $\frac{100\ C.45}{T.10\ C.42}$	En %. De los gastos. $\frac{100\ C.45}{C.48}$
		Pesos.	%	%	*Pesos.*	%	%
1	Central (todo el sistema)	26,127.67	0.45	0.83	89,668.99	1.54	2.85
2	Noroeste						
3	Midland	14,146.90	2.21	3.15			
4	Norte	16.00	0.01	0.02			
5	C. del Este						
	Total y término medio	40,290.57	0.56	0.99	89,668.99	1.25	2.20

TABLA Nº 11 (conclusión).—*Gastos de explotación, Ejercicio 1912–13.*

1	2	48	49	50	51	52	53	54	55	56	57
Número de orden.	Nómina de los ferrocarriles.	Gastos totales de explotación.									
		Total.	En término medio por un kilómetro de vía.	En término medio por 1,000.					En %.		
				Kilómetro de locomotoras.	Kilómetro de trenes.	Ejes-kilómetro de vehículos.	Toneladas-kilómetro de peso útil.	Toneladas-kilómetro de peso bruto sin locomotora.	De las entradas.	Del capital garantizado.	Del capital realizado.
			$\frac{C.48}{T.A\ C.12}$	$\frac{C.48}{T.5\ C.13}$	$\frac{C.48}{T.5\ C.7}$	$\frac{C.48}{T.6\ C.19}$	$\frac{C.48}{T.5\ C.18}$	$\frac{C.48}{T.5\ C.27}$	$\frac{100\ C.48}{T.10\ C.42}$	$\frac{100\ C.48}{T.12\ C.5}$	$\frac{100\ C.48}{T.12\ C.3}$
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	%	%
1	Central (todo el sistema)	3,144,337.57	1,990.04	679.57	869.19	19.68	12.30	4.10	53.81	5.47	6.52
2	Noroeste	246,964.59	1,389.34	870.37	1,188.58	32.14	19.05	7.95	68.16	5.91	3.58
3	Midland	448,687.24	955.18	731.17	822.10	20.19	14.96	4.30	70.03	3.96	3.80
4	Norte	89,262.01	781.94	1,258.03	1,519.79	43.36	23.79	8.88	64.11	3.33	2.27
5	U. del este	153,830.14	1,345.02	1,333.86	1,514.12	38.70	30.73	7.76	79.61	5.72	4.93
	Total y tº medio	4,083,081.55	1,662.45	715.00	901.06	20.86	13.28	4.38	56.87	5.54	4.96

TABLA N° 12.—*Ganancias y pérdidas, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10	11	12	13
Número de orden.	Nómina de los ferrocarriles.	Capital.				Productos.	Gastos.	Ganancias.	Inte. sobre el capital.		Relación entre.	
		Realizado.		Garantizado.					Realizado.	Garantizado.	Gastos y productos.	Productos y gastos.
		Total.	En término medio por un kilómetro de vía.	Total.	En término medio por un kilómetro de vía.				Ganancia.			
			C. 3 / T. A. C. 8		C. 5 / T. A. C. 8	T. 10 C. 42	T. 11 C. 48	C. 7–C. 8	100 X. C. 8 / C. 3	100 X. C. 9 / C. 5	C. 8 / C. 7	C. 7 / C. 8
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	%	%	*Número.*	*Número.*
1	Central:											
a	Extensión al norte	7,910,302.57	26,968.39	6,893,137.50	23,500	691,572.32	363,126.06	328,446.26	4.15	4.76	0.53	1.91
b	Extensión al este	13,602,949.23	27,119.30	11,787,518.92	23,500	1,183,045.58	621,153.08	561,892.50	4.13	4.77	0.53	1.90
c	R. Nordeste (P.-M.)	(1)		2,075,449.50	23,500	300,583.02	150,894.44	149,688.58		7.21	0.50	1.99
	Total y t° medio			20,756,105.92		2,175,200.92	1,135,173.58	1,040,027.34		5.01	0.52	1.92
d	R. Nordeste (C.-P.)	3,760,000.00	30,249.40			254,593.09						
e	Extensión Oeste	22,936,111.86	34,708.82			500,053.19	2,009,163.99	1,659,580.57				
f	Línea central					2,914,098.28						
	Total y t° medio	26,696,111.86	34,002.80			3,668,744.56	2,009,163.99	1,659,580.57	[2] 6.78		0.55	1.83
	Todo el sistema, Total y t° medio	48,209,563.66	30,511.68	20,756,105.92		5,843,945.48	3,144,337.57	2,699,607.91	5.60	5.01	0.54	1.86
2	Nordeste:											
a	Sección garantizada			1,886,039.50	23,500	163,598.50	111,504.11	52,094.39		2.76		
b	Sección no garantizada					198,747.19	135,460.48	63,286.71				
	Total y t° medio	6,906,642.46	38,854.40	1,886,039.50	23,500	362,345.69	246,964.59	115,381.10	1.67	2.76	0.68	1.47

3	Midland:											
a	Línea principal	....	....	7,450,348.35	23,500			152,135.48	....	2.04	....	....
b	R. Algorta, F. Bentos	....	....	3,284,665.50	23,500	640,737.87	448,687.24	38,609.22	....	1.18	....	....
c	R. 3 Arboles-P. Sola	....	....	[3] 1,350,714.20	23,500			1,305.93	....	0.43	....	....
	Total y t° medio	11,518,544.05	24,521.03	[4] 12,085,728.05	23.500	640,737.87	448,687.24	192,050.63	1.67	1.69	0.70	1.43
4	Norte	3,934,995.63	34,470.55	2,682,648.84	23,500	139,237.49	89,262.01	49,975.48	1.27	1.86	0.64	1.56
5	Uruguayo del este	3,122,427.45	27,301.03	2,687,702.05	23,500	193,234.43	153,830.14	39,404.29	1.26	1.47	0.80	1.26
	Total y t° medio general	73,692,173.25	30,004.22	[5] 40,098,224.36	....	7,179,500.96	4,083,081.53	3,096,419.41	4.20	3.52	0.57	1.76

[1] Incluído en el Ramal Nordeste (Colón-Pando).
[2] Incluyendo los rendimientos del Ramal Nordeste (Pando-Minas).
[3] Puesto al servicio el 10 de abril de 1913 (Capital en término medio $303,910.69).
[4] Promedio $11,342,835.24.
[5] Promedio $39,051,420.85.

TABLA N° 13 (primera).—*Estado de los capitales de los ferrocarriles, ejercicio 1912–13.*

[Pesos.]

1	2	3	4	5	6	7	8	9	10
			Capital		El capital está formado por—				
						Obligaciones con un interés de—			
Número de orden.	Nómina de los ferrocarriles.		Total	Por un kilómetro de vía (C. 1 F. A. C. 8)	Acciones ordinarias	4%	5%	5 y ½ %	6 %
1	Central:								
(a)	Extensión al Norte	Autorizado / Emitido / A emitir	7,830,830.29 / 7,647,666.00 / 185,725.29	16,072.11	4,700,000	....	2,947,666.00	....	....
(b)	Extensión al Este	Autorizado / Emitido / A emitir	13,840,290.29 / 13,146,178.70 / 699,121.59	19,202.69	4,011,000	....	5,059,178.70	....	....
(c)	Ramal Noroeste ([illegible])	Autorizado / Emitido / A emitir	3,750,000.00	30,240.40	....	....	....	....	....
(d)	Línea Central: R. [illegible] a San José, [illegible] Oeste[1]	Autorizado / Emitido / A emitir	11,455,[illegible] / 22,821,291.80 / 12,0[illegible].40	31,535.07	8,400,000	....	....	2,350,000	6,371,291.80
	Total	Autorizado / Emitido / A emitir	60,700,000.00 / 47,774,071.70 / 12,925,[illegible].40	24,061.83	18,142,000	4,700,000	8,006,783.70	2,350,000	6,371,291.80
2	Noroeste	Autorizado / Emitido / A emitir	6,520,881.00	18,[illegible].13	5[illegible]1,504	....	....	....	....
3	Midland	Autorizado / Emitido / A emitir	11,515,000.00 / 11,515,000.00	21,553.48	2,520,000	....	....	....	....
4	Norte	Autorizado / Emitido / A emitir	4,1[illegible],[illegible]0.00 / 4,0[illegible],18[illegible].00 / 71,5[illegible].00	33,794.03	470,000	....	....	....	....
5	Uruguayo del Este	Autorizado / Emitido / A emitir	2,958,151.00 / 2,956,[illegible].00 / 1,662.00	15,850.42	5[illegible]	....	....	....	....
	Total y término medio general	....	72,756,912.10	20,[illegible].41	22,582,372	4,700,000	8,006,783.70	2,350,000	6,371,291.80

[1] El capital emitido por la Compañía Extensión al Oeste y que no figura en esta tabla, es de $7,988,120 distribuído en partes iguales en Acciones y Debentures de 6%, de cuyo monto el Ferrocarril Central recibió en pago de la construcción de esa línea $7,388,541, en esta forma: En Acciones $3,394,481 y en Debentures $3,994,060, habiéndose amortizado de estos últimos hasta la cantidad de $174,370.

[2] Amortizado $196,460. [3] Amortizado $271,401.50. [4] Amortizado $98,690.60. [5] Amortizado $21,150.

Tabla N° 13 (segunda).—*Estado de los capitales de los ferrocarriles, ejercicio 1912–13.*

1	2	3	11	12	13	14	15	16	17	18	19
Número de orden.	Nómina de los ferrocarriles.		El capital esta formado por—							Interés fijo que deben abonar por el ligaciones y acciones de preferencia.	
			Empréstitos y acciones privilegiadas con un interés de—			Títulos hipotecarios con un interés de—					
			5%	6%	7%	3 y ½%	4%	5%	6%	Total.	Por un kilómetro de vía $\frac{C. 18}{T. A. C. 8}$
1	Central:										
a	Extensión al Norte	Autorizado Emitido A emitir								147,380.25	502.45
b	Extensión al Este	Autorizado Emitido A emitir	4,042,000.00							455,058.93	907.22
c-d	Ramal Nordeste (Cordón-Pando y Pando-Manga)	Autorizado Emitido A emitir			3,760,000					263,200.00	2,117.45
e f	Línea Central: R. 25 de Agosto a San José, otros ramales y capital emitido para construir la Ext. al Oeste[1]	Autorizado Emitido A emitir								699,527.51	1,058.58
	Total	Autorizado Emitido A emitir	4,042,000.00		3,760,000					1,565,166.69	990.59
2	Noroeste	Autorizado Emitido A emitir	1,377,913.10	2,744,095					2,140,262.50	301,957.10	2,036.25
3	Midland	Autorizado Emitido A emitir						[3] 8,895,000		434,750.00	925.51
4	Norte	Autorizado Emitido A emitir			1,175,000	2,112,180		[4] 282,000	[4] 47,000.00	173,096.30	1,516.32
5	Uruguayo del este	Autorizado Emitido A emitir					869,400	[5] 1,301,650		109,858.74	[2] 990.55
	Total y término medio general		5,419,913.10	2,744,095	4,935,000	2,112,180	869,400	10,478,650	2,187,262.50		

[1] El capital emitido por la Compañía Extensión al Oeste y que no figura en esta tabla, es de $7,988,120 distribuido en partes iguales en Acciones y Debentures de 6%, de cuyo monto el Ferrocarril Central recibió en pago de la construcción de esa línea $7,388,541, en ésta forma: En Acciones $3,394,481 y en Debentures $3,994,000, habiéndose amortizado de estos últimos hasta la cantidad de $174,370.

[2] Amortizado $196,460.

[3] Amortizado $271,401.50.

[4] Amortizado $98,090.00.

[5] Amortizado $21,150.

TABLA N° 14.—*Servicio de la garantía, Ejercicio 1912–13.*

1	2	3	4	5	6	7	8	9	10
		Datos invariables.							
		Garantía.							
Número de orden	Nómina de los ferrocarriles.	Duración.	Fecha en que empezó a correr.	Fecha en que termina definitivamente.	Longitud de las líneas.	Capital garantizado a razón de $23,500 por kilómetro.	Tasa del interés garantizado.	Monto del interés garantizado.	Monto del 1 y ½ que tienen derecho a retener.
		Años							
					Kilómetros.	*Pesos.*	%	*Pesos.*	*Pesos.*
1	Central.								
a	Ext. norte	40	23 Noviembre, 1890 1° Febrero, 1891 1° Mayo, 1891 5 Febrero, 1892	22 Noviembre, 1930 31 Enero, 1931 30 Abril, 1931 4 Febrero, 1932	293,325.00	6,893,137.50	3 y ½	120,629.90 120,629.90 241,259.80	51,698.52 51,698.52 103,397.04
b	Ext. este	35	20 Abril, 1906 15 Mayo, 1908 15 Noviembre, 1908 18 Julio, 1909 1° Agosto, 1909 1° Octubre, 1910 1° Octubre, 1911	19 Abril, 1941 14 Mayo, 1943 14 Noviembre, 1943 17 Julio, 1944 31 Julio, 1944 30 Septiembre, 1945 30 Septiembre, 1946	501,596.55	11,787,518.92	3 y ½	206,281.58 206,281.58 412,563.16	88,406.38 88,406.38 176,812.76
c	R. Nordeste (F. Minas)	40	6 Enero, 1889	5 Enero, 1929	88,317.00	2,075,449.50	3 y ½	36,320.36 36,320.36 72,640.72	15,565.86 15,565.86 31,131.72
2	Noroeste	40	1° Noviembre, 1886 20 Abril, 1887	31 Octubre, 1926 19 Abril, 1927	80,257.00	1,886,039.50	3 y ½	33,005.68 33,005.68 66,011.36	14,145.28 14,145.28 28,290.56
3	Midland:								
a	L. Principal	40	15 Agosto, 1889 17 Abril, 1890 1° Noviembre, 1890	14 Agosto, 1929 16 Abril, 1930 31 Octubre, 1930	317,036.10	7,450,348.35	3 y ½	130,381.10 130,381.10 260,762.20	55,877.60 55,877.60 111,755.20

b	Ramal Algorta—Fray Bentos	35	3 Agosto, 1910 22 Febrero, 1911 18 Julio, 1911	2 Agosto, 1945 21 Febrero, 1946 17 Julio, 1946	139,773.00	3,284,665.50	3 y ½	57,481.64 57,481.64 114,963.28	24,635.00 24,635.00 49,270.00
c	Ramal 3 Arboles—P. Sola	35	10 Abril, 1913	9 Abril, 1948	[1] 57,477.20	1,350,714.20	y ½	10,636.87 10,636.87	4,558.66 4,558.66
4	Norte	40	17 Septiembre, 1890 17 Abril, 1891	16 Septiembre, 1930 16 Abril, 1931	114,155.27	2,682,648.84	3 y ½	46,946.36 46,946.36 93,892.72	20,119.86 20,119.86 40,239.72
5	U. del este	35	30 Julio, 1908 15 Diciembre, 1910	29 Julio, 1943 14 Diciembre, 1945	114,370.30	2,687,702.05	3 y ½	47,034.78 47,034.78 94,069.56	20,157.76 20,157.76 40,315.52
	Total y t° medio gral				[2] 1,706,307.42	40,098,224.36		678,081.40 688,718.27 1,366,799.67	290,606.26 295,164.92 585,771.18

TABLA Nº 14.—*Servicio de la garantía, Ejercicio 1912–13*—Continuación.

1	2	11	12	13	14	15	16	17
		Liquidación del servicio.						
			Gastos.			Ganancia.		
Número de orden.	Nómina de los ferrocarriles.	Productos.	Constante de $88.50 p/kilom. de vía y p/semestre.	45° de las entradas.	Total. C. 12–C. 13	C. 11–C. 14	En % del capital garant. 100 xc 15 / c 7	Exceso de 1 y ½ a 5% C. 15–C. 10
		Pesos.	*Pesos.*	*Pesos.*	*Pesos*	*Pesos.*	%	*Pesos.*
1	Central:							
a	Ext. norte	323,215.67	25,959.26	145,447.05	171,406.31	151,809.36	4.40	100,110.84
		368,356.65	25,959.26	165,760.49	191,719.75	176,636.90	5.13	120,629.90
		691,572.32	51,918.52	311,207.54	363,126.06	328,446.26	4.76	220,740.74
b	Ext. este	547,100.35	44,391.28	246,195.16	290,586.44	256,513.91	4.35	168,107.53
		635,945.23	44,391.28	286,175.36	330,566.64	305,378.59	5.18	206,281.58
		1,183,045.58	88,782.56	532,370.52	621,153.08	561,892.50	4.77	374,389.11
c	R. Nordeste (P. Minas.)	154,257.73	7,816.04	69,415.98	77,232.02	77,025.71	7.42	38,320.36
		146,325.29	7,816.04	65,846.38	73,662.42	72,662.87	7.00	36,320.36
		300,583.02	15,632.08	135,262.36	150,894.44	149,688.58	7.21	72,640.72
2	Noroeste	83,427.81	....	....	53,773.63	29,654.18	3.14	15,508.90
		80,170.69	....	....	57,730.48	22,440.21	2.38	8,294.93
		163,598.50	....	....	111,504.11	52,094.39	2.76	23,803.83
3	Midland:							
a	L. Principal	....	....	....	....	81,219.02	2.18	25,341.42
		....	....	....	....	70,916.46	1.90	15,038.86
		....	....	....	....	152,135.48	2.04	40,380.28

b	Ramal Algorta—Fray Bentos	307,990.87 332,747.00	....	....	208,959.16 239,728.08	17,812.69 20,796.53	1.08 1.27	....
		640,737.87	....	....	448,687.24	38,609.22	1.18	....
c	Ramal 3 Arboles—P. Sola	....	....	....	....	1,305.93	0.43	....
		....	....	....	....	1,305.93	0.43	....
4	Norte	74,340.07 64,897.42	....	....	48,142.05 41,119.96	26,198.02 23,777.46	1.95 1.77	6,078.16 3,657.60
		139,237.49	....	....	89,262.01	49,975.48	1.86	9,735.76
5	U. del este	85,869.23 107,365.20	....	....	65,869.79 87,960.35	19,999.44 19,404.85	1.49 1.44	....
		193,234.43	....	....	153,830.14	39,404.29	1.47	....
	Total y to medio gral.	1,576,201.73 1,735,807.48	....	....	915,969.40 1,022,487.68	660,232.33 713,319.80	....	351,467.21 390,223.23
		3,312,009.21	....	....	1,938,457.08	373,552.13	3.52	741,690.44

TABLA Nº 14.—*Servicio de la garantía, Ejercicio 1912–13*—Conclusión.

1	2	18	19	20	21	22	23	24
		Liquidación del servicio.						
Número de orden.	Nómina de los ferrocarriles.	Exceso de 3 a 6% retenido p/ las Emps.	Exceso de 6%. Total.	Exceso de 6%. Retenido por la Empresa ⅓.	Exceso de 6%. A favor del Estado ⅔.	Monto de servicio. C. 9–C. 17	Derechos de Aduana.	Liquidado. C. 22–C. 23
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
1	Central:							
a	Ext. norte	....	....	....	....	20,519.06	....	20,519.06
		4,308.48	....	....	....	....	....	....
		4,308.48	....	....	....	20,519.06	....	20,519.06
b	Ext. este	....	....	....	....	38,174.05	....	38,174.05
		10,690.63	....	....	....	....	....	....
		10,690.63	....	....	....	38,174.05	....	38,174.05
c	R. Noroeste (P. Minas)	10,377.24	14,762.25	4,920.75	9,841.50	....	....	....
		10,377.24	10,399.41	3,466.47	6,932.94	....	....	....
		20,754.48	25,161.66	8,387.22	16,774.44	....	....	....
2	Noroeste	....	....	....	....	17,496.78	359.63	17,137.15
		....	....	....	....	24,710.75	3,746.20	20,964.55
		....	....	....	....	42,207.53	4,105.83	38,101.70
3	Midland:							
a	L. Principal	....	....	....	....	105,039.68	5,569.73	99,469.95
		....	....	....	....	115,342.24	6,459.10	108,883.14
		....	....	....	....	220,381.92	12,028.83	208,353.09
b	Ramal Algorta—Fray Bentos	....	....	....	....	57,481.64	1,257.76	56,223.88
		....	....	....	....	57,481.64	1,861.05	55,620.59
		....	....	....	....	114,963.28	3,118.81	111,844.47

c	Ramal 3 Arboles—P. Sola	....	....	....	....	10,636.87	233.96	10,402.91
		....	....	....	....	10,636.87	233.96	10,402.91
4	Norte	....	....	....	....	40,868.20	1,270.33	39,597.87
		....	....	....	....	43,288.76	725.83	42,562.93
		....	....	....	....	84,156.96	1,996.16	82,160.80
5	U. del este	....	....	....	....	47,034.78	....	47,034.78
		....	....	....	....	47,034.78	....	47,034.78
		....	....	....	....	94,069.56	....	94,069.56
	Total y t° medio gral	10,377.24	14,762.25	4,920.75	9,841.50	326,614.19	8,457.45	318,156.74
		25,376.35	10,399.41	3,466.47	6,932.94	298,495.04	13,026.14	285,468.90
		35,753.59	25,161.66	8,387.22	16,774.44	625,109.23	21,483.59	603,625.64

[1] Librado al servicio el 10 de Abril de 1913: Promedio, longitud K° 12,932.37. Cap. $303,910.69.

[2] Promedio en el año, Long. K° 1,661,762.69. Cap. $39,051,420.85.

Anexo Núm. II.

Resumen de las tablas estadísticas que se acompañan (Año 1912–13).

NÓMINA DE LAS LÍNEAS EN EXPLOTACIÓN.

La longitud de los ferrocarriles de la República, todos de trocha uniforme de mts. 1.44 eran, en esta fecha, de kilómetros 2,516,526.04 de cuya extensión:

	Km.s
Gozan de garantía	1,709,921.89
Sin garantía	806,604.15
Longitud total[1]	2,516,526.04

		Con garantía.	Sin garantía.	Total.
Central:				
Ext. Norte	Km.	296,856.74	782.55	297,639.29
Ext. Este	"	501,596.55		501,596.55
R. Nordeste (P. M.)	"	88,317.00		88,317.00
R. Nordeste (C. P.)	"		35,983.00	35,983.00
R. Coronilla	"		10,480.60	10,480.60
R. Manga	"		16,000.00	
R. San José	"		32,500.00	321,640.00
L. Central	"		273,140.00	
Ext. Oeste	"		339,175.00	339,175.00
Total	"	886,770.29	708,061.15	1,594,831.44
Noroeste	"	80,257.00	97,500.00	
R. Cuareim	"		1,043.00	178,800.00
Midland:				
L. Principal	"	317,036.10		
R. Alg. F. Bentos	"	139,855.73		514,369.03
R. 3. Arb. P. Sola	"	57,477.20		
Norte	"	114,155.27		114,155.27
U. Del Este	"	114,370.30		114,370.30
Total	"	1,709,921.89	806,604.15	2,516,526.04

[1] No están incluidos: El Ferrocarril Norte de Montevideo a los Corrales de Abasto (Barra de Santa Lucía) con una extensión de Km. 20 y el Ferrocarril de trocha angosta (0,90) de Puerto del Sauce hasta las proximidades de Ombues de Lavalle (Departamento de Colonia) con 42 km. de vía en explotación.

A cada 100 kilómetros cuadrados de superficie de la República, corresponden 1,35 kilometros de vía.
Por cada 1.000 habitantes, corresponde 2.05 kilómetros de vía.

TABLA 1.—*Existencia de locomotoras.*

Las diferentes líneas, tenían en servicio 171 locomotoras, equivalentes a una existencia media por 10 kms. de vía de 0.70 locomotoras, correspondiendo respectivamente:

	Total.	Por 10 km. de vía.
A. Central	118	0.75
A. Noroeste	17	.96
A. Midland	24	.51
A. Norte	5	.44
A. U. del Este	7	.61

El peso medio de una locomotora más el ténder, en servicio, en término medio, es de 63.21 toneladas.

TABLA 2.—*Existencia de coches de pasajeros.*

La existencia total de salones y coches de pasajeros es de 150. Clasificados por ferrocarril coresponde por 10 kms. de vía:

	Coches.	Ejes.	Asientos.	Peso propio.
	No.	*No.*	*No.*	*Tons.*
Central	0.65	2.53	35.22	13.73
Noroeste	.62	1.80	25.26	7.03
Midland	.45	1.23	17.60	6.79
Norte	.44	.88	14.02	4.12
U. del Este	.79	2.62	34.10	15.04
En término medio	.61	2.16	30.09	11.53

En término medio general, a un eje de coche corresponden 13.95 asientos y 5.34 toneladas de peso propio.

El peso propio medio por asientos es de 0.383 toneladas.

TABLA 3.—*Existencia de furgones.*

La existencia de furgones en servicio fué de 125 con un total de 418 ejes. Por 10 kms. de vía corresponden.

	Furgones.	Ejes.
Central	0.58	2.09
Noroeste	.56	1.46
Midland	.30	.77
Norte	.26	.53
U. del Este	.70	1.75
En término medio	.51	1.70

TABLA 4.—*Existencia de vagones de carga.*

El número de vagones de carga que para el servicio público tenían en existencia los diferentes ferrocarriles, ascendía a 3,193, correspondiendo respectivamente:

A. Central	2,151
A. Noroeste	279
A. Midland	435
A. Norte	153
A. U. del Este	175

En conjunto, estos vagones representan: 9,200 ejes, capacidad para 43,971 toneladas de carga y 25,037 toneladas de peso propio. De estos totales corresponden á 10 kms. de vía:

	Vagones.	Ejes.	Carga máxima.	Peso propio.
	Número.	*Número.*	*Tons.*	*Tons.*
Central	13.61	40.81	200.03	100.70
Noroeste	15.70	40.17	134.90	85.85
Midland	9.26	27.46	137.18	82.85
Norte	13.40	26.81	115.98	75.16
U. del Este	15.32	38.65	192.36	111.04
En t° medio	13.00	37.46	179.03	101.94

En término medio general resulta por eje: Carga máxima (tons) 4.78; peso propio (tons) 2.72.

TABLA 5.—*Kilómetros recorridos y trabajo efectuado por las locomotoras.*

Las 171 locomotoras que tienen las líneas en servicio, han recorrido durante el año 5:710.619 km. o sea en término medio 33.395 por locomotora, cuyo recorrido se descompone como sigue:

	Kms.
En servicio de trenes	4, 531, 441
En servicio suplementario	122, 105
En servicio maniobras	784, 703
En servicio trenes de inspección, balasto, etc	266, 338
En servicio otras líneas	6, 032

El trabajo efectuado por las locomotoras, en toneladas kilómetros incluyendo el peso de las locomotoras, ha sido de:

Peso útil	307, 439, 305
Peso muerto	920, 631, 015
Total	1, 220, 070, 320

O sea en por ciento del peso total: Peso útil, 25.03; peso muerto, 74.97.
A un tren-kilómetro han correspondido:

	Excluyendo peso de locomotoras.	Incluyendo peso de locomotoras.
Toneladas de peso útil	68	68
Toneladas de peso muerto	138	203
O sea en total	206	271

TABLA 6.—*Recorrido por los ejes de vehículos.*

Los ejes de vehículos han recorrido kms. 195,748,577, como sigue:

	Kns.
Por coches de pasajeros	25, 028, 644
Por furgones	26, 743, 716
Por vagones de carga	143, 976, 217
O sea por eje:	
De coche	47, 224
De furgones	63, 980
De vagones	15, 650
Y en total y término medio	19, 289
Del total de vagones de carga eran:	
Cargados (Ejes-kilom.)	100, 586, 462
Vacíos	43, 389, 755

A un eje de vagón cargado correspondieron 0.43 eje de vagón vacío.

TABLA 7.—*Tráfico de pasajeros.*

El número de pasajeros transportados, ha sido de	1, 838, 213
Que han recorrido, kilometros	111, 535, 942
Resultando un recorrido medio por pasaj. de k	61

Del total de pasajeros, corresponden á:

	Por ciento.
Primera clase	49. 33
Segunda clase	50. 67

En término medio se han transportado por km. de vía:

Pasajeros	748
Pasajeros-kilómetros	45, 412

A un eje km. de coches correspondieron 4.41 pasajeros-kilometros. Durante este año, en término medio, un habitante ha viajado 91 kilomt.

TABLA 8.—*Tráfico de encomiendas y equipajes.*

	Encomiendas.	Equipajes.
Se transportaron en total, toneladas	35, 567	5, 778
Que han recorrido kilómetros	3, 159, 334	877, 846
Correspondiendo, por lo tanto a un kilómetro de vía, tons.-kilom	1, 286	357
El recorrido medio de una tonelada fué de km	89	152

TABLA 9.—*Tráfico de cargas.*

Se han transportado en el año:			
Toneladas			1, 742, 425
Que han recorrido, kilómetros			205, 594, 748
O sea recorrido medio de una tonelada			170
En término medio por un km. de vía se han transportado:			
Toneladas			709
Toneladas-kilómetros			120, 353
A un eje-km. de vagón correspondieron, toneladas			205
Del total de la carga corresponde según clasificación:			
Frutos del país		462, 446	(26. 54%)
Mats. de construcción		467, 371	(26. 82%)
Mercaderías generales		342, 526	(19. 66%)
Varios		72, 425	(4. 16%)
Mats. de la Compañía		126, 512	(7. 26%)
		1, 471, 280	(84. 44%)
Animales en pié:	No.		
Caballar	17, 577		
Ovino	1, 244, 192		
Vacuno	560, 466		
Porcino	27, 305		
Total	1, 849, 540	271, 145	(15. 56%)
		1, 742, 425	100%

A un habitante de la República, han correspondido 241 toneladas-kilómetros de carga.

TABLA 10.—*Productos de explotación.*

Pasajeros: Este servicio ha dado una entrada de		$1, 966, 236. 01
O sea en término medio por un k. de vía		800. 56
Y por pasajero-kilómetro, como sigue:	Cents.	
Central	1. 68	
Noroeste	3. 43	
Midland	2. 16	
Norte	3. 61	
U. del Este	1. 72	
Promedio	1. 76	

El producto de pasajeros representa el 27.39 por ciento de las entradas totales.

Exceso de equipajes: Este servicio ha producido	$31, 918. 26
O sea por kilómetro de vía	13. 00
Y en por ciento de las entradas totales	0. 44
Encomiendas: El producto de este servicio fué de	316, 373. 75
O sea por un kilm. de vía	128. 81
Y en por ciento de las entradas totales	4. 41
Cargas: El servicio de cargas ha producido	4, 583, 948. 00
O sea en t° medio por un km. de vía	1, 866. 38

Y por tonelada-kilómetro de carga transportada, como sigue:

	Carga.	Animales.	Carga total.
	Ctms.	*Ctms.*	*Ctms.*
Central	1. 59	1. 23	1. 52
Noroeste	2. 17	1. 65	2. 00
Midland	1. 32	1. 44	1. 35
Norte	2. 56	3. 07	2. 57
U. del Este	2. 18	2. 18	2. 18
Promedio	1. 62	1. 27	1. 55

El producto de la carga representa el 63.85 por ciento de las entradas totales.

Telegráfo: El servicio telegráfico ha producido	$32, 437. 90
O sea en por ciento de las entradas totales	0. 45

Trenes Especiales: Producto $35,814.36 ó sea 0.50% de las entradas totales.

Muellaje: Producto $40.681.40 o sea 0.57% de las entradas totales.

Almacenaje: Producto $10.679.03 o sea 0.15% de las entradas totales.

Arrendamientos: Producto $20,920.11 o sea 0.29% de las entradas totales.

Alq. T. Rodante: Producto $43,123.07 o sea 0.60% de las entradas totales.

Varios (restaurant, etc.): Producto $97,368.57 o sea 1.35% de las entradas totales.

Productos totales: Los productos totales de explotación ascendieron:

Á	$7, 179, 500. 56
O sea en término medio	2, 923. 18
Por un km. de vía por 1,000—	
Kilómetros de locomotoras	1. 257. 22
Kilómetros de tren	1, 584. 37
Ejes-kilómetros de vehículos	36. 68
Tonelada-kilómetro de peso útil	23. 35
Tonelada-kilómetro de peso bruto sin	7. 71
Locomotora y represeatan—	
En por ciento de los gastos	176.
En por ciento del capital garantizado	9. 74
En por ciento del capital realizado	8. 48

TABLA 11.—*Gastos de explotación.*

Vía y Obras: Estos gastos ascendieron a	$1, 160, 498. 77
Igual a un gasto por un km. de vía, en t° medio de	472. 50
Y representan en por ciento:	
De las entradas	16. 16
De los gastos	28. 42
Locomotoras: Ascendieron estos gastos a	1, 261, 799. 73
Ó sea en término medio—	
Por un km. de vía	513. 75

Kilómetros de locomotoras	220. 96
Y por mil—	
Kilómetros de locomotoras	220. 96
Ejes-kilómetros de vehículos	6. 45
Toneladas-kilm. de peso útil	4. 10
Y representan en por ciento	1. 35
De las entradas	17. 58
De los gastos	30. 90
Telégrafos: Se ha gastado	27, 813. 08
Ó sea por un kim. de vía	11. 32
Y representan en por ciento—	
De las entradas	0. 39
De los gastos	0. 68
Tren rodante: Estos gastos ascendieron a	206, 781. 74
Ó sea en término medio por un k. de vía	84. 19
Y por 1,000—	
Ejes-kilómetros de vehículos	1. 06
Tons.-kilom. de peso útil	0. 67
Tons.-kilom. de peso bruto	0. 22
Y representan en por ciento—	
De las entradas	2. 88
De los gastos	5. 06
Tráfico: Los gastos de tráfico ascendieron a	934, 917. 09
Y en término medio por un km. de vía	380. 66
Y por 1,000—	
Kilómetros de locomotoras	163. 72
Ejes-kms. de vehículos	4. 78
Tons. kms. de peso útil	3. 04
Tons.-kms. de peso bruto	1. 00
Y representan en por ciento—	
De las entradas	13, 02
De los gastos	22. 90
Gastos generales: Ascendieron a	361, 311. 58
O sea en término medio por un km. de vía	147. 11
Y por 1,000 tons.-kims. de peso útil vía	1. 18
Y representan en por ciento—	
De las entradas	5. 03
De los gastos	8. 85
Alq. Tren Rodante: Ascendieron a	40, 290. 57
o sea en por ciento—	
De las entradas	0. 56
De los gastos	0. 99
Varios (restaurant etc.), gastos totales	89, 668. 99
o en por ciento—	
De las entradas	1. 25
De los gastos	2. 20
Gastos totales: Los gastos totales de explotación ascendieron a	4, 083, 081. 55
o sea en término medio—por un km. de vía	1, 662. 45
y por 1,000—	
kms. de locomotoras	715. 00
kms. de trenes	901. 06
Ejes-kms. de vehículos	20. 86
Tons-kms. de peso útil	13. 28

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Gastos totales—Continuación.

Tons-kms. de peso bruto	$4. 38
y en por ciento—	
De las entradas	56. 87
Del capital garantizado	5. 54
Del capital realizado	4. 96

TABLA 12.—*Ganancias y pérdidas.*

Los productos y gastos de explotación de este año importaron:

Productos	$7, 179, 500. 96
Gastos	4, 083, 081. 55
Resultando una ganancia de	3, 096, 419. 41

La explotación ha dado un interés de:

	S/c el capital realizado.	S/c el capital garantizado.
Central:		
Ext. Norte	4. 15	4. 76
Ext. Este	4. 13	4. 77
R. Nordeste (P. M.)	....	7. 21
R. Nordeste (C. P. y P. M.) ramales, Ext. Oeste y L. Central	6. 78	....
Término medio	5. 60	5. 01
Noroeste	1. 67	2. 76
Midland:		
L. Principal	....	2. 04
R. Alg. F. Bentos	....	1. 18
R. 3. Arb. P. Sola	....	0. 43
Término medio	1. 67	1. 69
Norte	1. 27	1. 86
U. del Este	1. 26	1. 47
Total y término medio general	4. 20	3. 52

TABLA 13.—*Estado de los capitales.*

El capital emitido por los ferrocarriles es de	$72, 756, 954. 10
O sea en término medio por un km. de vía como sigue:	
Central—	
Ext. norte	26, 072. 12
Ext. este	26, 202. 69
R. Nordeste (C. P. y P. M.)	30, 249. 40
L. Central, R, 25 de Agosto á San José, otros ramales y capital emitido para construir la línea Ext. oeste	34, 535. 07
Término medio	29, 981. 63
Noroeste	34, 805. 43
Midland	24, 513. 48
Norte	35, 794. 93
U. del este	25, 853. 42
Total y t° medio general	29, 623. 44

El interés que deben abonar por acciones y obligaciones de preferencia es de $2,644,828.83.

TABLA 14.—*Servicio de la garantía.*

La longitud de vía con goce de la garantía, está representada por kms. 1,706,307.42 de cuyo total fué explotado durante el año un promedio de kms. 1,661,762.59.

El capital que representan estas líneas aforadas al costo de £5,000 por km. es de $40,098,224.36, cerrespondiendo al año. un promedio de $39,051,420.85.

El interés garantizado de 3 y ½% sobre este capital ascendió en conjunto a	$1,366,799.67
Y el monto abonado solo fué de	625,109.23
De lo cual resulta una diferencia o sea un monto reducido en este servicio de	741,690.44
Esta economía resultante del exceso de 1 y ½ á 5% de rendimiento neto, han concurrido a formarla, las siguientes líneas:	
Central—	
Ext. norte	220,740.74
Ext. este	374,389.11
R. Nordeste P. M.	72,640.72
Noroeste	23,803.83
Midland, L. principal	40,380.28
Norte	9,735.76
Monto reducido	741,690.44
A este resultado, debe agregarse la suma reintegrada al Estado por el Ramal Nordeste del Ferrocarril Central por concepto de los ¾ del excedente del 6% de rendimiento neto o sean	16,774.44
Total	758,464.88

Anexo Núm. III.

DATOS ESTADÍSTICOS AÑOS 1913-14

Productos de explotación (años 1913-14)

1	2	3	4	5	6
Nómina de los ferrocarriles.	Longitud.	Productos de explotación.			
		Pasajeros.	Cargas.	Varios.	En total C. 3 a C. 5.
Central:	*Kilómetros.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
Ext. norte	298, 856. 74	154, 215. 57	396, 498. 91	20, 672. 70	571, 387. 18
Ext. este	501, 596. 55	318, 003. 50	714, 006. 27	55, 140. 29	1:087, 150. 06
R. Nordeste P. M	88, 317. 00	69, 285. 20	173, 255. 06	16, 091. 88	258, 612. 14
R. Nordeste C. P	35, 983. 00	70, 413. 53	134, 542. 83	18, 985. 58	223, 941. 94
Ext. oeste	339, 175. 00	149, 009. 55	288, 910. 67	29, 034. 28	466, 954. 50
L. central	321, 640. 00	706, 347. 39	1:483, 101. 69	327, 682. 63	2:577, 131. 71
Todo el sistema total y t° medio	1:583, 568. 29	1:527, 254. 74	3:190, 315. 43	467, 607. 36	5:185, 177. 53
Noroeste	80, 257. 00	32, 994. 20	92, 121. 89	9, 680. 32	134, 796. 41
	97, 500. 00	40, 082. 92	111, 914. 03	11, 760. 11	163, 757. 06
Total y t° medio	177, 757. 00	73, 077. 12	204, 035. 92	21, 440. 43	298, 553. 47
Midland:					
L. Principal	317, 036. 10	....	....	....	446, 540. 67
R. Ag. F. Bentos	139, 855. 73	....	....	....	128, 555. 79
R. 3 Ab. P. Sola	57, 477. 20	....	....	....	28, 361. 63
Total y t° medio	514, 369. 03	188, 625. 50	364, 381. 30	50, 451. 29	603, 458. 09
Norte	114, 155. 27	35, 865. 39	78, 030. 79	8, 902. 91	122, 799. 09
C. del este	114, 370. 30	69, 086. 49	88, 589. 59	16, 880. 32	174, 556. 40
Total y t° medio general	2:504, 219. 89	1:893, 909. 24	3:925, 353. 03	565, 282. 31	6:384, 544. 58
Del total corresp—					
Con G	1:709, 921. 89	868, 055. 85	1:906, 883. 81	177, 819. 71	2:952, 759. 37
Sin G	794, 298. 00	1:025, 853. 39	2:018, 469. 22	387, 462. 60	3:431, 785. 21

1	7	8	9	10	11	Comparación.			
	Productos de explotación.								
	En término medio por:					Años.		Más En.	
Nómina de los ferrocarriles.	1 km. de vía. C. 6 / C. 2	1 pasaj. C. 3 / Nº 1 C. 4	1 pasaj. km. C. 3 / Nº 1 C. [illegible]	1 ton de carga. C. 4 / Nº 1 C. 16 C. 12	1 ton km. út. C. 4 / Nº 1 C. 17	1912–13	1913–14	1912–13	1913–14
	Pesos.	*Pesos.*	*Cents.*	*Pesos.*	*Cents.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
Central.									
Ext. norte	1,924.79	2.78		2.30		691,572.32	571,387.18	120,185.14	
Ext. este	2,167.38	2.27		3.76		1,183,045.58	1,087,150.06	95,895.52	
R. Nordeste á M.	2,928.23	0.60		0.90		300,583.02	258,612.14	41,970.88	
R. Nordeste C. P.	6,223.55	0.29		0.31		254,563.09	223,911.91	30,651.17	
Ext. oeste	1,376.74	1.77		1.62		500,053.19	466,954.50	33,098.69	
L. central	8,012.47	0.51		1.68		2,914,098.28	2,557,131.71	356,966.57	
Todo el sistema total y t. medio	3,274.56	0.90	1.58	3.06	1.32	5,843,945.48	5,185,177.53	658,767.95	
Noroeste	1,679.56					163,298.50	134,706.41	28,592.09	
	1,679.56					198,717.19	163,727.06	34,990.13	
Total y t. medio	1,679.56	2.21	3.63	2.47	2.23	362,345.69	298,552.47	63,792.22	
Midland:									
L. Principal	1,408.48					504,980.26	446,540.67	58,389.59	
R. Ay. F. Gento	949.20					128,401.63	128,565.79		151.16
R. 3 Ab. P. Sola	493.43					[1]7,402.98	28,361.63		20,958.65
Total y t. medio	1,173.20	2.58	2.28	2.26	1.23	640,737.87	603,458.09	37,279.78	
Norte	1,075.72	2.79	3.58	2.36	2.56	139,237.49	122,799.09	16,438.40	
C. del este	1,526.24	1.13	1.60	1.47	2.30	193,234.43	174,556.40	18,678.03	
Total y t. medio general	2,549.51	1.00	1.68	2.82	1.53	7,179,500.96	6,384,544.58	794,956.38	
Del total corresp.—									
Con G.	1,726.84					3,312,009.21	2,952,759.37	359,249.84	
Sin G.	4,320.53					3,867,491.75	3,431,785.21	435,706.54	

[1] Puesta al servicio el 10 de Abril de 1913.

Tráfico de pasajeros y cargas (año 1913–14).

1	2	3	4	5	6	7	8
Nómina de los ferrocarriles.	Tráfico de pasajeros.						
	Primera clase.	Segunda clase.	Total. 2+3	Recorrido.	En t° medio por un km° de vía.		Pasajeros por día.
					C. 4 / No. 2 C. 2	C. 5 / No. 2 C. 2	C. 4 / C. 360
Central:	*Números.*	*Números.*	*Números.*	*Pasaj-kms.*	*Pasaj.*	*Pasaj-km.*	*Número.*
Ext. Norte [1]	32,228	23,250	55,478	....	187	....	154
Ext. Este [1]	72,300	67,612	139,972	....	279	....	389
R. Nordeste P. M. [1]	52,743	62,506	115,249	....	1,305	....	320
R. Nordeste C. P.	125,775	117,501	243,276	....	6,761	....	676
Ext. Oeste	41,526	42,786	84,312	....	249	....	234
L. Central	797,430	714,145	1,511,575	....	4,700	....	4,199
Todo el sistema (total y t° medio)	869,888	835,029	1,704,917	96,680,247	1,077	61,052	4,736
Noroeste [2]	22,694	10,333	33,027	2,196,637	186	12,358	92
Midland	37,817	35,314	73,131	8,260,565	142	16,060	203
Norte	9,025	3,831	12,856	1,062,390	113	9,307	36
U. del este	29,275	31,597	60,872	4,309,936	532	37,684	169
Total y t° medio general	968,699	916,104	1,884,803	112,509,775	753	44,928	....

[1] Con garantía del Estado.

[2] Con garantía del Estado kms. 80,257.

Tráfico de pasajeros y cargas (año 1913–14)—Continuación.

1	9	10	11	12	13	14	15	16	17	18	19
Nómina de los ferrocarriles.	Tráfico de cargas.										
	Frutos del país.	Materiales de construcción.	Mercancías generales.	Materiales de la Compañía.	Varios.	Total. C. 9 a C. 13	Animales.	Total General. C. 14+C. 15	Recorrido.	En t° medio por un km° de vía. C. 16 / N°. 2 C. 2	En t° medio por un km° de vía. C. 17 / N°. 2 C. 2
	Toneladas.	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Ton.-kiloms.*	*Toneladas.*	*Ton.-km.*
Central:											
Ext. Norte [1]	26,662	11,378	56,748	6,239	24,091	125,118	39,560	164,678	....	555	....
Ext. Este [1]	58,847	19,532	43,875	9,920	3,154	135,328	64,731	200,059	....	399	....
R. Nordeste P. M. [1]	45,125	95,546	31,448	3,471	4,263	179,843	16,456	196,299	....	2,223	....
R. Nordeste C. P.	102,360	171,851	76,628	13,918	7,610	372,367	44,355	416,722	....	12,415	....
Ext. Oeste	49,707	53,279	29,201	6,283	1,917	140,387	44,570	184,957	....	545	....
L. Central	211,034	205,749	221,988	71,153	45,133	755,057	196,412	951,469	....	2,958	....
Todo el sistema (total y t° medio)	249,300	299,554	248,023	77,562	46,595	921,034	209,575	1,130,609	210,225,847	714	132,754
Noroeste [2]	42,279	12,769	13,727	3,880	39	72,694	13,784	86,478	9,083,592	486	51,101
Midland	46,955	18,321	33,011	14,188	6,449	118,924	56,353	175,277	29,606,259	341	57,558
Norte	17,930	2,616	6,048	1,946	28	28,568	6,510	35,078	3,053,231	307	26,746
U. del este	14,494	29,023	12,209	....	623	56,349	3,760	60,109	3,854,028	526	33,698
Total y t° medio general	370,958	362,283	313,018	97,576	53,734	1,197,569	289,982	1,487,551	255,822,957	594	102,156

[1] Con garantía del Estado.

[2] Con garantía del Estado kms. 80,257.

Tráfico de pasajeros y cargas (año 1913–14)—Conclusión.

1	Comparación.							
	Pasajeros.				Carga.			
Nómina de los ferrocarriles.	Años.		Más en.		Años.		Más en.	
	1912-13	1913-14	1912-13	1913-14	1912-13	1913-14	1912-13	1913-14
Central:	*Númer*	*Número.*	*Número.*	*Número.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas*
Ext. Norte[1]	61,045	55,478	5,567	....	200,136	164,678	35,458	....
Ext. Este[1]	138,672	139,972	....	1,300	217,359	200,059	17,300	....
R. Nordeste P. M.[1]	109,044	115,249	....	6,205	234,510	196,299	38,211	....
R. Nordeste C. P.	250,618	243,276	7,342	....	553,120	446,722	106,398	....
Ext. Oeste	88,568	84,312	4,256	....	203,411	184,957	18,454	....
L. Central	1,451,023	1,511,575	....	60,552	1,128,507	951,469	177,038	....
Todo el sistema (total y t° medio)	1,657,986	1,704,917	....	46,931	1,326,023	1,130,609	195,414	....
Noroeste[2]	29,322	33,027	....	3,705	113,224	86,478	26,746	....
Midland	77,227	73,131	4,096	....	193,536	175,277	18,259	....
Norte	12,923	12,856	67	....	36,787	35,078	1,709	....
U. del este	60,754	60,872	....	118	72,853	60,109	12,744	....
Total y t° medio general	1,838,212	1,884,803	4,103	50,754	1,742,423	1,487,551	254,872	....
Menos en 1912-13	46,651	....	46,651	....	....	....	....	....
Menos en 1913-14	....	....	....	....	....	254,872	....	....
Iguales	1,884,863	1,884,803	50,754	50,754	1,742,423	1,742,423	254,872	....

[1] Con garantía del Estado.

[2] Con garantía del Estado kms. 80,257.

Anexo Nº IV.

DATOS ESTADÍSTICOS, AÑO 1914-15.

Productos de explotación (año 1914–15).

1	2	3	4	5	6
Nómina de los ferrocarriles.	Longitud.	Productos de explotación.			
		Pasajeros.	Cargas.	Varios.	En total C. 3 a C. 5.
Central:	*Kilometros.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
Ext. norte	296,856.74	119,028.57	297,451.78	17,298.08	433,778.43
Ext. este	501,596.55	262,029.29	595,895.14	52,523.31	910,447.74
R. nordeste (P. M.)	88,317	58,248.59	143,719.07	15,521.18	217,488.84
R. nordeste (C. P.)	35,983	58,503.74	104,788.10	19,417.62	182,709.46
Ext. al oeste	339,175	128,226.23	245,079.17	28,373.39	401,678.79
L. central	321,040	687,824.01	1,312,253.97	303,624.88	2,303,702.86
Todo el sistema (total y tº medio)	1,583,568.29	1,313,860.43	2,699,187.23	436,758.46	4,449,806.12
Noroeste	80,257	27,337.54	67,950.16	10,038.99	105,326.69
	97,500	33,210.94	82,549.07	12,195.84	127,955.85
Total y tº medio	177,757	60,548.48	150,499.23	22,234.83	233,282.54
Midland:					
L. Principal	317,036.10	....	....	....	430,354.70
R. Ag. F. Bentos	139,855.73	....	....	....	87,952.82
R. 3 Ar. P. Sola	57,477.20	....	....	....	18,203.76
Total y tº medio	514,369.03	144,972.11	340,591.07	50,948.10	536,511.28
Norte	114,155.27	25,873.88	53,121.59	9,119.96	88,115.43
U. del este	114,370.30	60,955.54	67,530.18	14,814.95	143,300.67
Total y tº md. Gral	2,504,219.89	1,606,210.44	3,310,929.30	533,876.30	5,451,016.04
Del total corresponde:					
Con garantía	1,709,921.89	698,445.52	1,566,258.99	170,264.57	2,434,969.08
Sin garantía	794,298	907,764.92	1,744,670.31	363,611.73	3,016,046.96

Productos de explotación (año 1914-15)—Continuación.

1	7	8	9	10	11	Comparación			
Nómina de los ferrocarriles.	Productos de explotación					Años.		Más en.	
	En término medio por—								
	1 kilo. de vía. C.5/C.2	1 pasaj. C.5/N·1 C.4	1 pasaj.-kilóm. C.3/N·1 C.5	1 ton de carga C.4/N·1 C.14-12	1 ton-k de carga C.4/N·1 C.17	1913-14	1914-15	1913-14	1914-15
	Pesos.	*Pesos.*	*Cents.*	*Pesos.*	*Cents.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
Central:									
Oeste norte	1,[illegible] 23	2.72		2.[illegible]		571,[illegible].18	435,778.43	137,[illegible].75	
[illegible]	1,[illegible] 19	1.[illegible]		[illegible]		1,[illegible],[illegible].06	910,447.74	176,792.[illegible]	
E. noroeste (F. M.)	2,[illegible] [illegible]	0.[illegible]		0.95		258,[illegible]12.14	217,488.84	41,[illegible]	
E. noroeste (C. F.)	5,[illegible]	0.[illegible]		0.[illegible]		22[illegible],[illegible].91	182,[illegible].46	41,2[illegible].45	
[illegible]	1,[illegible] 28	1.88		1.72		4[illegible],[illegible].50	401,[illegible].79	65,2[illegible].71	
E. central	7,[illegible]	0.[illegible]		1.[illegible]		[illegible] 71	2,[illegible] 86	2[illegible],[illegible]	
Todo el sistema, total y promedio	2,[illegible]	0.79	1.[illegible]	2.[illegible]	[illegible]	[illegible],1[illegible],157.[illegible]	4,449,[illegible].12	7[illegible],[illegible].41	
Noroeste	{ 1,712.[illegible] / 1,[illegible].17					[illegible] 41 / 1[illegible] 06	10[illegible],[illegible].69 / 127,[illegible].85	[illegible],[illegible] 72 / [illegible],[illegible].21	
Total y promedio	1,[illegible].17	2.19	2.[illegible]	2.[illegible]	2.43	2[illegible],[illegible].47	2[illegible],2[illegible].[illegible]	6[illegible],2[illegible].93	
Mediterráneo:									
[illegible]	1,[illegible].43					4[illegible],[illegible].[illegible]	4[illegible],[illegible].76	[illegible],185.97	
[illegible]	[illegible].88					12[illegible],[illegible].79	[illegible],962.82	40,[illegible].97	
[illegible]	[illegible].71					2[illegible],[illegible]	18,2[illegible].76	1[illegible],117.87	
Total y promedio	1,[illegible]	2.47	2.40	2.41	1.28	[illegible],[illegible].[illegible]	[illegible],[illegible].28	6[illegible],[illegible].81	
Norte	771.89	2.81	[illegible].69	2.[illegible]	2.[illegible]	122,[illegible]	[illegible],115.41	34,[illegible]	
Occidente	1,2[illegible].95	1.19	1.64	1.62	2.[illegible]	1[illegible],[illegible]	1[illegible],[illegible].67	31,2[illegible].75	
Total y promedio general	2,176.7[illegible]	0.88	1.67	2.80	1.54	[illegible],[illegible],5[illegible].[illegible]	5,451,016.04	9[illegible],[illegible].[illegible]	
Del total corresponde:									
Con garantía	1,424.02					2,952,759.87	2,434,969.08	517,790.29	
Sin garantía	3,797.12					3,431,785.21	3,016,046.96	415,738.25	

Tráfico de pasajeros y cargas (año 1914–15).

1	2	3	4	5	6	7	8
Nómina de los ferrocarriles.	Tráfico de pasajeros.						
	Primera clase.	Segunda clase.	Total, 2+3.	Recorrido.	En t° medio por 1 k° de vía.		Pasaj.-por día.
					C 4 / N° 2C2.	C 5 / N° 2C2.	C 4. / C. 360.
Central:	*Números.*	*Números.*	*Números.*	*Pasaj. Km. s.*	*Pasaj.*	*Paj. km°.*	*Num.*
Ext. Norte [1]	24,379	19,462	43,841	....	148	....	122
Ext. Este [1]	69,564	66,510	136,074	....	271	....	378
R. Nordeste P. M.[1]	48,080	54,609	102,690	....	1,163	....	285
Idem C. P.	117,674	117,323	231,997	....	6,531	....	653
Ext. Oeste	32,472	35,732	68,204	....	201	....	189
L. Central	777,022	742,098	1,519,120	....	4,723	....	4,220
Todo el sitema (total y t° medio)	836,128	832,470	1,668,598	84,214,081	1,054	53,180	4,635
Noroeste [2]	20,553	7,092	27,645	1,702,261	156	9,576	77
Midland	30,921	27,670	58,591	6,035,354	114	11,734	162
Norte	6,764	2,443	9,207	701,822	81	6,148	26
U. del este	25,213	26,042	51,255	3,716,758	448	32,498	142
Total y t° medio general	919,579	895,717	1,815,296	96,370,276	725	34,483	....

[1] Con garantía del Estado.

[2] Con garantía del Estado Kms. 80,257.

Tráfico de pasajeros y cargas (año 1914–15)—Continuación.

Nómina de los ferrocarriles.	9	10	11	12	13	14	15	16	17	18	19
	Tráfico de cargas.										
	Frutos del país.	Materiales de constr.	Mercancías generls.	Materiales de la Compañ.	Varios.	Total. C9 á C13.	Animales.	Total general. C14+C15.	Recorrido.	En t° medio por un km.° de vía. C. 16. / N° 2° 2.	En t° medio por un km.° de vía. C. 17. / N° 2° 2.
Central:	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Tons. kms.*	*Tons.*	*Ton. kms.°*
Ext. Norte[1]	36,284	9,496	18,655	4,765	15,946	85,146	47,714	132,860	....	448	....
Ext. Este[1]	50,365	11,141	30,775	8,312	3,533	104,126	71,259	175,385	....	350	....
E. Nordeste F. C. M.[1]	33,834	72,628	21,493	3,221	4,236	135,412	19,633	155,045	....	1,756	....
Idem C. I.	91,059	129,876	49,793	10,688	8,757	290,173	83,924	374,097	....	10,396	....
Ext. Oeste	47,900	23,207	23,335	4,290	2,344	101,046	45,760	146,806	....	433	....
L. Central	212,200	174,733	145,584	52,324	32,650	617,491	229,979	847,470	....	2,635	....
Todo el sitema (total y t° medio)	244,793	225,730	159,392	58,772	38,912	727,509	240,981	968,580	176,660,364	612	111,558
Noroeste[2]	28,961	6,938	11,403	1,986	42	49,330	16,341	65,671	6,204,947	369	34,907
Midland	38,732	18,846	24,783	8,510	945	91,806	58,294	150,100	26,693,071	292	51,895
Norte	10,790	1,596	4,889	1,366	13	18,654	6,022	24,676	2,071,067	216	18,143
U. del este	11,639	17,211	9,263	....	1,000	39,113	5,318	44,431	2,865,695	388	25,056
Total y t° medio general	334,915	270,311	209,730	70,634	40,912	926,502	328,956	1,253,458	214,495,144	501	85,653

[1] Con garantía del Estado.

[2] Con garantía del Estado Kms. 80.257.

Nómina de los ferrocarriles.	Comparación.							
	Pasajeros.				Carga.			
	Años.		Más en.		Años.		Más en.	
	1913-14	1914-15	1913-14	1914-15	1913-14	1914-15	1913-14	1914-15
Central:	*Número.*	*Número.*	*Número.*	*Número.*	*Toneladas.*	*Toneladas.*	*Toneladas.*	*Toneladas.*
Ext. Norte[1]	55,478	43,841	11,637	....	164,678	132,860	31,818	....
Ext. Este[1]	139,972	136,074	3,898	....	200,059	175,385	24,674	....
R. Nordeste P. M.[1]	115,249	102,690	12,559	....	196,299	155,045	41,254	....
Idem C. P.	243,276	234,997	8,279	....	446,722	374,097	72,625	....
Ext. Oeste	84,312	68,204	16,108	....	184,957	146,806	38,151	....
L. Central	1,511,575	1,519,120	....	7,545	951,469	847,470	103,999	....
Todo el sistema (total y t° medio)	1,704,917	1,668,598	36,319	....	1,130,609	968,580	162,029	....
Noroeste[2]	33,027	27,645	5,382	....	86,478	65,671	20,807	....
Midland	73,131	58,591	14,540	....	175,277	150,100	25,177	....
Norte	12,856	9,207	3,649	....	35,078	24,676	10,402	....
U. del este	60,872	51,255	9,617	....	60,109	44,431	15,678	....
Total y t° medio general	1,884,803	1,815,296	69,507	....	1,487,551	1,253,458	234,093	....
Menos en 1914-15	....	69,507	69,507	....	....	234,093	....	....
Iguales	1,884,803	1,884,803	69,507	....	1,487,551	1,487,551	234,093	....

[1] Con garantía del Estado.

[2] Con garantía del Estado Kms. 80,257.

Anexo Nº V.

DISPOSICIONES GENERALES.

Exención de Derechos Aduaneros, Contribución Inmobiliaria, Etc.

CENTRAL.

Ley Octubre 4, 1866.—Artº 6º Los materiales, útiles y artículos que se importaren del extranjero para la construcción, uso y consumo del ferrocarril, serán libres de todo derecho durante el término de la garantía y la propiedad del ferrocarril será libre de toda contribución u otro impuesto por el término de cuarenta años á contar del día en que toda la línea quede abierta al tráfico.

Ley Febrero 25, 1878.—Artº 2º Los materiales, útiles y artículos que se importaren del extranjero para la construcción, uso y consumo exclusivo del ferrocarril, serán libres de todo derecho durante el término de esta concesión y la propiedad del ferrocarril será libre de toda contribucion u otro impuesto durante este mismo término.

Ley Febrero 25, 1878.—Artº 13 La línea queda siempre propiedad de la Compañía concesionaria, pero los privilegios y exenciones que por esta concesión acuerda el estado solo durarán por el término de cuarenta años contados desde la fecha en que se aprueben estas modificaciones y aprobado que sea este contrato quedan anuladas todas las concesiones anteriores á la presente.

NOROESTE SECCIÓN NO GARANTIZADA.

Ley Febrero 8, 1881.—Los materiales, útiles y artículos que se importaren del extranjero para la construcción, uso y consumo exclusivo del ferrocarril serán libres de todo derecho durante el término de concesión y la propiedad del ferrocarril será libre de toda contribución ú otro impuesto durante el mismo término.

Ley Agosto 27, 1884.—Las Empresas de ferrocarriles objeto de la presente ley, serán exoneradas del pago de la patente y contribución directa, como también de los derechos de importación a los materiales que se introduzcan para su construcción.

EXPROPIACIÓN.

Ley Febrero 8, 1881.—Los privilegios y exenciones que el Estado otorga por esta concesión, durarán por el término de cuarenta años contados desde la fecha en que estas modificaciones sean aprobadas, quedando anuladas todas las concesiones anteriores á la presente, tan luego fuese aprobado el presente contrato y reservándose el Estado el derecho de expropiación con sujeción á las leyes.

Ley Agosto 27, 1884.—Transcurridos 25 años de explotación, el Estado tendrá el derecho de expropiar para su uso toda la línea férrea comprendida en ésta ley, cuya expropiación se verificará á justa tasación del valor que tenga al tiempo de efectuarse ésta, con más un *veinte por ciento* de bonificación.

Anexo Nº VI.

ESTIPULACIONES ESPECIALES SOBRE LAS GARANTÍAS DE LOS FERROCARRILES.

Convenio de 26 de Agosto de 1891 ratificado por Ley promulgada el 12 de Octubre del mismo año:—

Artículo 16º. (A) Cuando las entradas netas o ganancias no excedan del 1 y ½ por ciento por año, calculado sobre la suma de £.5.000 por kilómetro, las Compañías las retendrán en su poder sin hacer deducción alguna de la garantía.

(B) Cuando dichas entradas pasen del 1 y ½ por ciento mencionado en el inciso anterior, el exceso hasta 3 y ½ por ciento, es decir, las entradas desde

1 y ½ á 5 por ciento, calculadas siempre sobre £5.000 por kilómetro, será aplicado á la redución del interés garantizado por el Estado.

(C) Cuando las entradas netas excedan del 5 por ciento al año sobre la suma de £5.000 por kilómetro, el exceso hasta 6 por ciento al año será retenido por la Compañía del Ferrocarril para su propio uso.

(E) Las cantidades recibidas antes de ahora y que recibieren en adelante las Compañías del Gobierno, a título de garantía, serán devueltas a éste hasta su completa extinción, cuando las entradas netas excedan al 6 por ciento calculadas sobre £5.000 el kilómetro.

NOTA.—Este último inciso fué modificado en cuanto se refiere á las secciones garantizadas del Ferrocarril Central y respecto a los Ramales Algorta, Fray Bentos y Tres Arboles-Piedra Sola del Midland, como sigue:

El exceso de 6% se distribuirá así; un tercio para las Empresas y dos tercios al Gobierno, hasta que produzca el 8% anual sobre el capital garantizado, debiéndose destinar a devolución de garantía todo exceso sobre esas sumas.

En caso que las utilidades líquidas excedan del 8% anual sobre el capital real o sea sobre el valor de la línea, el Gobierno podrá optar entre intervenir en las tarifas hasta reducir los resultados netos sobre el capital real á 8% anual o recibir dicho exceso quedando entendido que en ningún caso podrá aumentar el capital sin consentimiento del Gobierno.

Si hecha la redución de tarifas los resultados del rendimiento fueran menores del 8% al año sobre el capital real, el Gobierno se compromete á completarlo.

IMPUESTOS DIRECTOS.

Por JUAN A. MÁRQUEZ.

Montevideo, Uruguay.

Entre los impuestos directos que más rendimientos anuales producen al Fisco, se encuentran los de Contribución Inmobiliaria o Territorial, que son objeto de dos leyes distintas, una que rije para el Departamento de la Capital y otra para los demás Departamentos en que está dividida la República.

La Contribución territorial relativa al departmento de la Capital, grava el valor de la tierra y el de las construcciones o mejoras que en élla existan.

La tasa del impuesto es la de seis pesos y medio por mil sobre los valores de aforos y estos están calculados con un 15% de rebaja sobre el valor real.

La tasación de las tierras, construcciones o mejoras ha sido practicada por comisiones especiales, las que al mismo tiempo formaban un censo o empadronamiento general de la propiedad y cuya conservación está cometida a una Oficina o Sección denominada de 'Empadronamiento" anexa a la Dirección General de Impuestos Directos, que es la Dirección de servicio que tiene a su cargo la recaudación del impuesto inmobiliario.

Cada propiedad inmueble, con o sin mejoras, tiene su planilla particular en la que se determinan los precios unitarios aplicados, tanto al metro de la tierra, como al de las construcciones o mejoras, de modo que en todo momento puede conocerse a cuanto ascienden los valores territoriales como los de las construcciones o mejoras.

Este sistema ha dado muy buenos resultados. A base de tales tasaciones particulares a cada propiedad, se preparan anualmente y con toda anticipación los boletos o recibos impresos destinados para la recaudación, de forma que no abonados por los contribuyentes, quedan en las cajas de las Oficinas y denuncian por sí solos la mora en que se ha incurrido en el pago. Cada boleto contiene el número de orden, aforo y la cuota impositiva.

La Contribución Inmobiliaria de la Capital produce anualmente dos millones doscientos mil pesos. En diez años este impuesto se ha duplicado en su ren-

dimiento debido a tres causas principales: la más justa estimación de la tierra y de las construcciones practicadas al formarse el empadronamiento de la propiedad; la construcción de edificios de relativo costo y la valorización general operada desde el año 1905.

La ley admite previo pago, reclamos contra los aforos que se consideren elevados por los contribuyentes, ante la propia Dirección de Impuestos, la que es asesorada por otra Oficina denominada Dirección General de Avalúos y Administración de Bienes del Estado y en apelación resuelve un Jurado del que forman parte los mayores contribuyentes al impuesto y su fallo es inapelable.

La Ley admite también reclamos por aumentos de aforo que quieran hacer los contribuyentes previo pago y se resuelven en la misma forma que los de rebaja de aforo. Del 6½ por mil de tasa, el 1 por mil del impuesto se destina a mejoras en el Municipio de la Capital.

Los valores o aforos establecidos para el pago del impuesto territorial en la Capital, se sirven de base para fijar el precio de las expropiaciones que tenga que decretar el Estado por necesitar la propiedad privada para usos públicos y entonces se abona al propietario el valor del aforo, con más una indemnización que no baje del 15 y no exceda del 40% de ese aforo. También rigen los valores para el pago del impuesto de herencia.

Los contribuyentes que no paguen dentro de los plazos fijados por el Gobierno, sufren según los meses de atraso, los recargos de 5,10,15 y 25 0/0 sobre la cuota impositiva, tanto en la capital como en la campaña. Llegando al 25 0/0,—4° mes—se hace efectivo el cobro.

La otra contribución inmobiliaria, establecida también por Ley anual, es para los dieciocho Departamentos restantes de la República. Cada Departamento, a los efectos de la aplicación del impuesto territorial, está dividido en zonas y cada zona tiene un aforo especial.

Estos valores o aforos se determinan teniendo en cuenta la calidad y naturaleza de las tierras,—si son o no aptas para la agricultura o para la ganadería,—su proximidad o alejamiento de las vías férreas, de los caminos carreteros, puentes, etc.

Dentro de esas mismas zonas y sus aforos, se señalan otros aforos inferiores para las tierras cenagosas o de bañados, las pedregosas o de serranías que las hagan inaptas para la industria ganadera o agrícola.

La tasa del impuesto es igual a la de la Capital, o sea la de seis y medio por mil y de ese 6 ½ 0/00, el uno por mil se destina a mejoras rurales, esto es a puentes y caminos carreteros que se aplican por las Intendencias Municipales de los Departamentos.

La ley admite también, previo pago, reclamos contra los aforos que se consideren excesivos por los contribuyentes, en primer término ante las Oficinas Recaudadoras y en segundo en apelación ante un Jurado del cual forman parte contribuyentes importantes de cada Departamento y su fallo sobre el aforo que debe aplicarse es apelable ante otro Jurado que funciona en la capital y cuya resolución es inapelable.

Este impuesto territorial produce anualmente dos millones setecientos mil pesos.—En las ciudades, villas y pueblos del interior grava la tierra y las construcciones, pero en la campaña grava sólo el valor de la tierra, de modo que las construcciones o mejoras están libres de impuesto.

Los aforos establecidos por la ley para los campos, son muy bajos con relación a su valor real.—En algunos casos, este valor de aforo es inferior al 50 0/0 del valor real.

El Gobierno tiene ya pronto un trabajo de censo de la propiedad rural, con fijación del aforo medio que le corresponde, según la estadística de los valores,

tomados de las operaciones de ventas; y entonces, cuando ese trabajo se ponga en práctica por ley para el cobro del impuesto, se rebajará la tasa del impuesto, de 6½ por mil tal vez al 4 por mil o 4½.

En las villas y pueblos de la campaña este trabajo está en vigor desde hace muchos años y sus valores que son con 15 por ciento de rebaja tienen aplicación en las expropiaciones con un porcentaje de bonificación y en el pago del impuesto de herencias. La contribución territorial de campaña, no se rige por el ejercicio económico, sino por el año, de enero a diciembre.

Resueltos que sean los reclamos por rebajas o aumentos de aforos, interpuestos tanto en la Capital como en los departamentos, se les devuelven a los interesados las diferencias de cuotas impositivas que correspondan, según los nuevos aforos establecidos por el Jurado.

PATENTES DE GIRO.

También es objeto de los leyes el impuesto a las Patentes de Giro. Para el Departamento de la capital se promulga todos los años una ley especial y otra para los 18 Departamentos restantes de la República.

En la capital o sea en la ciudad de Montevideo, la ley de Patentes de Giro—salvo casos excepcionales—el impuesto recae sobre los capitales, a razón de 1% hasta 100,000 en los establecimientos por menor—y 150,000 en los al por mayor y de ½ sobre los respectivos excedentes.

Además de esta proporción de uno por ciento, los establecimientos comerciales están sujetos a aumentos proporcionales, con arreglo a su ubicación en zonas comerciales y de preferencia, número de dependientes, calidad de instalaciones, etc. de modo que el impuesto tenga alguna relación con las ganancias presuntas.

Para graduar las Patentes de los Bancos e Instituciones de Crédito, la Ley tiene en cuenta el volumen de las operaciones, las utilidades realizadas en el año anterior y los demás elementos que conduzcan al conocimiento de la importancia de cada Institución. Con arreglo a estos preceptos legales, en el año corrientê los bancos pagaron las siguientes Patentes de Giro:

Banco de Crédito	$4,000
Banco de Galicia	3,000
Banco Comercial	8,000
Banco de Londres	15,000
Banco Italiano	15,000
Banco Francés del Uruguay	4,000
Banco Español	12,000
Banco de Préstamos	1,500
Banco Francés, Supervielle y Cía	5,000
Banco Popular	10,000
Banco de Cobranzas	3,000
Banco de Cauciones y Créditos	1,500
La Caja Obrera	2,000
Banco Territorial	1,500
Banco Italo Belga	1,500
Banco Británico	6,000
Banco Anglo Sud-Americano	2,500
Banco Credit Foncier	2,000
Banco Alemán	4,000
Banco Londres y Brasil	3,000
Banco The National City Bank	1,250
Total	$105,750

Los importadores y exportadores, además de la Patente que les corresponde, pagan también como Patente de Giro el 1½% sobre el valor de exportación e importación en la Aduana (y sin perjuicio de los derechos aduaneros).

Con relación a los importadores, el Estado puede optar para el cobro de las Patentes, entre el valor de las existencias en los establecimientos o el valor de la importación y exportación con arreglo a una escala proporcional que formula la Oficina Recaudadora. Esta dispone de un personal de avaluadores que fija anticipadamente el valor de las Patentes.

Tratándose de fábricas o establecimientos industriales, la Ley toma por base los elementos siguientes: producción, capital, importancia de las maquinarias, potencialidad de los motores y número de operarios, para determinar el valor de las Patentes.

La Ley exonera de Patentes, por cierto número de años a las fábricas de tejidos, de sarnífugos, de preparaciones químicas, etc. no conocidas en el país, etc. Están exentos de Patentes, los vendedores ambulantes de frutas, verduras, leche, pan, etc., repartidores de diarios, troperos, etc.

Los escribanos, procuradores y abogados pagan Patente por medio de Timbres de $0.20 y $0.30 aplicables en cada escrito que presenten, actas que suscriban y audiencias a que concurran.

Los traductores un Timbre de $0.20 en cada traducción.

Los médicos, ingenieros, dentistas, veterinarios y agrónomos en la capital, están exonerados de Patente durante dos y en la campaña durante tres años, contados desde que reciban sus títulos. Este favor es para los que reciban sus títulos en el país. Las agencias de vapores y buques de ultramar pagan como Patente $10.—por cada despacho de buques.

El impuesto de Patentes de Giro en la Capital produce un millón de pesos al año, incluyéndose el 1½ por mil de importación y exportación. La Ley admite reclamos de Patentes, previo pago y estos son resueltos directa a inapelablemente por un Jurado del que forman parte comerciantes é industriales. No se concede rebaja alguna, si no se justifica el derecho, por medio del libro de inventarios del año anterior al del pago del impuesto.

El término de duración de la Patente es de Enero á Diciembre de cada año. El Gobierno concede prórrogas frecuentemente para el pago de este impuesto.

PATENTES DE GIRO DE CAMPAÑA

o sea los dieciocho Departamentos restantes.

La duración es la misma que la de la Capital de enero á diciembre de cada año. Para las Patentes regidas por Capital, no se aplica estrictamente el régimen del uno por ciento, sino el de escalas de uno a mil pesos, de mil uno a dos mil quinientos, de dos mil quinientos á cinco mil, de cinco mil uno á diez mil, etc.

La ley admite la acumulación de ramos, pagando además de la Patente principal el 50% del ramo acumulado.—El ramo de despacho de bebidas no es acumulable y se grava con una Patente especial, con objeto de que no se aumente su número. Si están abiertos después de las diez de la noche, pagan un recargo de Patente.

Todo negocio, oficio o industria, que la Ley no especifique, no está gravado con Patentes de Giro. Los comisionistas o agentes viajeros del exterior, pagan una Patente de $100.—en cualquier época del año que empiecen a operar.

Las dos Leyes de Patentes establecen Patentes elevadísimas, llamadas prohibitivas á las quinielas de pelotas, de billar, tiros a la paloma, casas de sport, a fin de que no funcionen en el país.

Esta Ley de Patentes de Campaña será en breve objeto de reformas, equiparándola en cuanto sea posible a la de la Capital que grava los comercios con arreglo a su capital y permitiéndoles la acumulación de ramos, cosa que en la actualidad no admite.

Por esta causa, no se hace más extenso el presente memorandum. El impuesto de Patentes de Giro en los 18 Departamentos produce $700,000 anuales.

TIMBRES Y PAPEL SELLADO.

Constituyen un solo impuesto pagable ya en fojas de papel sellado, ya en timbres volantes. La tasa del impuesto aplicable a las operaciones comerciales o civiles, es la de uno y medio por mil, con las excepciones siguientes: Cesiones o enajenaciones que es la de uno por mil; contratos de sociedades que es la del 0.75% y alquileres, que tienen una graduación especial.

El papel sellado sobrante, no usado, se puede cambiar al finalizar el Ejercicio y lo mismo ocurre con los timbres. El impuesto de timbres y papel sellado, produce actualmente $1,000,000 al año, en conjunto.

Para facilidad de las operaciones bancarias en materia de cheques, la Dirección de Impuestos sella las libretas bancarias, con el timbre de $0.02, cobrando el impuesto.

HERENCIAS Y DONACIONES.

Este impuesto ha sido objeto de serias modificaciones en los años 1910 y 1914 y aún está pendiente de otras reformas, en el Honorable Cuerpo Legislativo. Las Leyes que lo rigen son las de 30 de agosto de 1893, 16 de julio de 1910 y 14 de septiembre de 1914.

Grava también a las sociedades anónimas con un tercio por mil al año sobre su capital, y abonándose este tercio por mil al año, las acciones pueden trasmitirse por causa de muerte, sin nuevo pago por razón de herencia.

El impuesto denominado de herencias alcanza tambien á las donaciones y legados. Se gradúa por el parentesco entre el causante y sus herederos, donatarios y legatarios y gradualmente escalando según su importancia. (Véase la escala en el Anexo, pág. —). Cuando el heredero legatario ó donatario está domiciliado en el extranjero, queda gravado con un cinco por ciento de recargo.

El rendimiento de este impuesto varía según la importancia de las sucesiones que se liquidan en cada Ejercicio Económico.

Las sucesiones deben abrirse dentro de los tres meses de la muerte de una persona. Los herederos gozan del plazo de dos meses contados desde que se liquida la sucesión, para abonarlo y recargándose con un interés de 6% anual, la Ley acuerda plazos hasta dos años. Las herencias, legados y donaciones a favor de instituciones nacionales o municipales, están libres del impuesto de herencias y donaciones. Este impuesto produce un promedio anual de $500,000.

Para el avalúo de los títulos de renta, se toma por base la cotización oficial de éllos el día anterior a la liquidación del impuesto; para la de los bienes inmuebles ubicados en la Capital el aforo establecido para el pago del impuesto territorial y para el de los campos, el que fije la Dirección de Avalúos con una rebaja de 20 por %. También se puede tratándose de campos, fijarlo por medio de tasadores.

Los interesados que dejen vencer el plazo de 60 días sin abonar el impuesto, sufren un recargo de 20%.—Mientras no se pague el impuesto de herencias, no se puede vender ni gravar en forma alguna los bienes sucesorios, estándoles prohibido á los escribanos autorizar operaciones que afecten tales bienes sucesorios.

IMPUESTO UNIVERSITARIO.

Por Ley especial de 28 de Diciembre de 1904, se creó un impuesto sobre todos los valores que se inscriban en el Registro General de Ventas, es decir, sobre todas las translaciones de dominio que se operen sobre bienes raíces,

aplicándose por los Escribanos timbres apropiados á las copias de las escrituras que versen sobre tales bienes.

Este impuesto produce anualmente $85,000 y se destina á la construcción de edificios universitarios.

Con la renta que produce ese impuesto se han construído espléndidos edificios para universidad, facultad de medicina y facultades de comercio y de matemáticas.

PEQUEÑOS IMPUESTOS.

Para fomento de la Biblioteca Nacional, existe un impuesto de $0.05 cobrado por medio de un timbre que se aplica a cada foja de informes, copias, testimonios y certificaciones, que a pedido de particulares o por mandato superior, expidan las Oficinas dependientes del Poder Ejecutivo en el Departamento de la Capital. Anualmente produce $7,000.

Para fomento de la Dirección General del Registro del Estado Civil, existe también un impuesto que se percibe por medio de timbres aplicables a las partidas de nacimiento, defunción y matrimonios. Produce anualmente $11,000.

Y por último, para la Caja de Jubilaciones y Pensiones Civiles y Caja Militar, existen otros timbres que se aplican a los expedientes y a los dictámenes fiscales, etc., dando un rendimiento muy reducido.

ANEXO.

Ley de Impuestos a las Herencias, Legados y Donaciones de 17 de Septiembre de 1914, que Modifica y Amplía las de 30 de Agosto de 1893 y 16 de Julio de 1910. Ley Aclaratoria de 30 de Septiembre de 1914. Decreto Reglamentario.

Poder Legislativo.

El Senado y Cámara de Representantes de la República Oriental del Uruguay reunidos en Asamblea General,

Decretan:

Articulo 1.° Las herencias, legados y donaciones por causa de muerte cuyo causente fallezca después de la promulgación de esta ley, pagarán al Estado el impuesto que á continuación se expresa, de acuerdo con la siguiente escala:

Tasa aplicable á la parte hereditaria ó hijuela, legado ó donación comprendidos entre.

Grados de parentesco.	$500 á $2,500.	$2,500 á $10,000.	$10,000 á $20,000.	$20,000 á $50,000.	$50,000 á $100,000.	$100,000 á $250,000.	Más de $250,000
	%	%	%	%	%	%	%
Descendientes legítimos y naturales menores de edad	1	2	3	4	5	6	7
Descendientes legítimos ó naturales mayores de edad y parte que corresponde al cónyuge supérstite por asignación forzosa	1½	3	4	5	6	7	8
Ascendientes legítimos o naturales	2	4	5	6	7	8	9
Cónyuges sobre el excedente de porción conyugal	3	6	7	8	9	10	11
Hermanos, hijos adoptivos y padres adoptantes en testamento	4	8	9		11	12	13
Hermanos, hijos adoptivos y padres adoptantes ab intestato	6	12	13	14	15	16	17
Colaterales de tercer grado	8½	17	18	19	20	21	22
Colaterales de cuarto grado	9	18	19	20	21	22	24
Colaterales de más de cuatro grados y extraños	11	22	23	24	25	26	27

La cuota de impuesto correspondiente á herederos directos es por la parte que exceda de mil quinientos pesos.

Art. 2.° El impuesto que se crea por el artículo anterior gravará toda transmisión de bienes por herencia ó legado y las donaciones entre vivos, siéndole aplicable el articulo 3.° de la ley de 16 de Julio de 1910, que prevé el caso de donaciones entre vivos, el que solamente se modifica aumentando el derecho que establece el 5 por ciento.

El artículo 2.° de la ley del 30 de Agosto de 1893 quede modificado también, elevando al 5% el impuesto, cuando el heredero, legatario o donatario está domiciliado en el extranjero.

Art. 3.° Modifícase el artículo 33 de la Ley de Herencias de 30 de Agosto de 1893 en la siguiente forma:

Los actuarios y escribanos no podrán autorizar escrituras de partición, expedir hijuelas, ni realizar acto alguno que afecte el dominio de los bienes hereditarios, sino después que haya sido aprobado judicialmente el cálculo del impuesto y se presente certificado de haberse pagado, ó estar exceptuado del pago del mismo.

De dicho certificado se hará referencia en la escritura con la expresión del número, fecha y oficina que lo haya expedido.

Exceptúase de lo dispuesto en el inciso 1.° el caso previsto en el articulo 34.

La infracción de este articulo será castigada con una multa igual al monto de los derechos adeudados, de cuyo pago serán solidariamente responsables los contratantes y por un cincuenta por ciento de dicha multa los escribanos autorizantes de los contratos.

Las disposiciones de este articulo no son aplicables á los casos de nuevos contratos, salvo que en las copias de escrituras particionarias, hijuelas judiciales ó escrituras en cuya virtud se otorguen, no conste el pago del impuesto.

Art. 4.° Suprímese la obligación de afianzar, contenida en el artículo 19 de la Ley de Herencias de 30 de Agosto de 1893.

Art. 5.° El producido del impuesto que se crea por la presente ley se destinará:

El 60 % al Tesoro de Instrucción Pública.

Del 40 % restante:

A) Veinticuatro mil pesos á la Caja de Pensiones Militares;

B) Treinta mil pesos por una sola vez para la instalación de los talleres de la Escuela Educacional de Varones de Suárez.

C) Nueve mil seiscientos pesos al Instituto de Ciegos "General Artigas" como subvención;

D) El sobrante para el fondo de interés y amortización de los Vales del Tesoro, y una vez amortizados éstos á rentas generales.

Art. 6.° En el Departamento de Montevideo se podrá continuar tomando como base para el avalúo de los bienes raíces el que las propiedades tengan establecido para el pago de la Contribución Inmobiliaria. En los demás Departamentos también podrá tomarse la misma base cuando se trate de propiedades empadronadas.

Cuando se trate de propiedades no empadronadas, se procederá á la tasación de los inmuebles, salvo que los interesados se conformen con la apreciación que haga la Oficina de Avaluaciones, la que deberá expedirse dentro del término de tres días.

Tratándose de propiedades rurales, la tasación ó apreciación se contrae al terreno, con prescindencia de las mejoras que el predio contenga.

Art. 7.° En la propiedad de los Departamentos de campaña se aplicará el impuesto sucesorio considerando el valor de tasación menos un 20 %.

Art. 8.° Los Bancos, Agencias ó depositarios en general, no podrán entregar dinero, titulos ó valores mobiliarios, de personas fallecidas, sin previo mandato judicial.

La falta de cumplimiento de esta obligación será penada con multa de otro tanto del impuesto.

Art. 9.° La Oficina de Estado Civil enviará al "Diario Oficial" mensualmente la lista de los fallecidos en el país, que será publicada en sección especial y clasificada por Departamento.

Art. 10. Los Bancos u otras instituciones que tengan depositados valores cuyos dueños no cobren los intereses estipulados ni se presenten á reclamar los cupones por más de cinco años, están obligados á denunciar el hecho á la Dirección General de Impuestos, á los efectos de los derechos que puedan corresponder al Fisco.

En caso de que el Banco ó depositario no hicieran la denuncia dentro de treinta días, cumplidos los cinco años, pagarán una multa de otro tanto del impuesto correspondiente.

En caso de denuncia de bienes de propiedad fiscal, por vía de herencias se adjudicará al denunciante la tercera parte de los bienes depositados.

Art. 11. Dentro de los treinta días de promulgada esta ley, los depositarios harán conocer á la Dirección General de Impuestos el nombre de las personas que se encuentran en las condiciones del artículo anterior.

Art. 12. Quedan exonerados de este impuesto los herederos directos cuya cuota hereditaria no exceda de mil quinientos pesos.

Art. 13. Auméntase á sesenta días el plazo para el pago del impuesto de herencias y donaciones que indica el artículo 31 de la ley de 1893.

Ese plazo empezará á regir después de ejecutoriado el auto que fija la liquidación respectiva.

DISPOSICIÓN TRANSITORIA.

Artículo 14. Quedan en suspenso por un plazo de treinta días las ejecuciones pendientes por pago del impuesto de herencias y exoneradas de multa.

Art. 15. El Poder Ejecutivo reglamentará la presente ley.

Art. 16. Comuníquese, etc.

Sala de Sesiones de la Honorable Cámara de Representantes, en Montevideo á 17 de Septiembre de 1914.

RICARDO J. ARECO,
Presidente.

JULIO M. CLAVELLI,
Secretario.

MINISTERIO DE HACIENDA,
Montevideo, Septiembre 17 de 1914.

Cúmplase, acúsese recibo, comuníquese e insértese en el Registro de este Ministerio y con la copia respectiva remítase al Ministerio del Interior.

BATLLE Y ORDÓÑEZ.
PEDRO COSIO.

DECRETO REGLAMENTARIO.

MINISTERIO DE HACIENDA,
Montevideo, Septiembre 23 de 1914.

El Presidente de la República, reglamentando la ley de 17 del corriente, que amplia y modifica las de 30 de Agosto de 1893 y 16 de Julio de 1910, acuerda y

Decreta:

Artículo 1.° Los impuestos de herencias, legados y donaciones continuarán recaudándose por la Dirección de Impuestos Directos en la Capital y por las Administraciones de Rentas en los Departamentos del litoral é interior, con arreglo á las comunicaciones que les sean pasadas por los Actuarios de los respectivos Juzgados Letrados y los Escribanos de Registro, según correspondan, y de acuerdo con las disposiciones del decreto de 27 de Septiembre de 1893.

Art. 2.° La expresada Dirección, en cumplimiento de lo dispuesto en el artículo 5.°, vertirá en el Banco de la República, para la cuenta corriente de la Instrucción Pública, el 60% de las sumas que perciba por concepto de los impuestos creados por la ley que se reglamenta.

Igual versión, en la cuenta corriente de la institución nombrada y por el mismo porcentaje, efectuarán las Administraciones de Rentas en las respectivas Sucursales del Banco de la República.

Art 3.° Desde la fecha en que se recauden los impuestos creados por la ley de 17 del corriente, la propia Dirección de Impuestos efectuará también las siguientes entregas:

A la Caja de Pensiones Militares, dos mil pesos mensuales, para complementar la de veinticuatro mil pesos anuales, que se le asigna por el referido artículo 5.°.

Al Instituto de Ciegos (General Artigas), ochocientos pesos mensuales, para complementar la de nueve mil seiscientos pesos anuales que se le asigna por la ley.

A la Escuela Educacional de Varonese de Joaquín Suárez, la de dos mil quinientos pesos mensuales, hasta completar la de trienta mil pesos que por una sola vez se le asigna por la referida ley.

El saldo de la renta que produzcan los referidos impuestos será vertido en el Banco de la República y sus respectivas Sucursales, en la cuenta especial de Vales del Tesoro, que al efecto le será abierta al Gobierno, y mientras dichos Vales del Tesoro no sean amortizados.

Art. 4.° El auto aprobatorio de todo cálculo ó liquidación de impuesto establecerá con toda precisión y claridad la ley y disposición de ella que haya sido aplicada, así como la suma que cada heredero o legatario deberá abonar por impuesto de herencias y donaciones.

Art. 5.° Dictado el auto á que se refiere el artículo anterior y pasado que sea en autoridad de cosa juzgada, los Actuarios de todos los Juzgados Letrados y Tribunales de la República lo comunicarán por escrito al Ministerio de Hacienda y á la Dirección de Impuestos Directos, en la Capital, y á las Administraciones de Rentas en Campaña, con transcripción fiel de la liquidación ó cálculo verificado en los respectivos autos.

Expresarán también en dicha comunicación, como antecedente imprescindible, la ley que haya sido aplicada en la respectiva liquidación y si la sucesión es testada ó intestada.

Art. 6.° A los efectos de lo dispuesto en el artículo 10 de la ley que se reglamenta, la Dirección de Impuestos abrirá un libro en que anotará las denuncias que formulen los Bancos ó Instituciones de Crédito sobre existencias en sus cajas de depósitos de fondos ó valores cuyos dueños no cobren los intereses ni retiren los cupones durante un período de más de cinco años.

Art. 7.° Queda facultada la Dirección de Impuestos para imprimir en hojas sueltas la ley y el presente Reglamento, a fin de remitirlos a los Tribunales, Juzgados, Bancos ó Instituciones de Crédito y demás oficinas que correspondan.

Art. 8.° La Dirección de Impuestos Directos rendirá mensualmente, cuenta á la Contaduría General del producido e inversión del Impuesto de Herencias y Donaciones.

Art. 9.° (Transitorio) De acuerdo con el artículo 14 de la ley, durante el término de treinta días, contados desde el 17 del corriente, no se aplicarán multas por pago del Impuesto de Herencias y Donaciones.

Art. 10. Comuníquese, publíquese, etc.

BATLLE Y ORDÓÑEZ.
PEDRO COSIO.

MINISTERIO DE HACIENDA,
Montevideo, Septiembre 30 de 1914.

Con esta fecha el Poder Ejecutivo ha cumplido la siguiente ley:

"Poder Legislativo.—El Senado y Cámara de Representantes de la República Oriental del Uruguay, reunidos en Asamblea General, decretan:—Artículo 1.° Declárase que en el artículo 1.° de la ley sobre herencias y donaciones, fecha 17 de Septiembre, donde dice: "Descendientes legítimos ó naturales menores de edad y parte que corresponde al cónyuge supérsite por asignación forzosa," debe decir: "Descendientes legítimos ó naturales mayores de edad y parte que corresponde al cónyuge, etc."—Queda autorizado el Poder Ejecutivo para hacer la corrección del caso en el texto de la ley.—Artículo 2.° Comuníquese, etc.—Sala de Sesiones de la Honorable Cámara de Representantes, en Montevideo á 29 de Septiembre de 1914.—R. J. ARECO, Presidente.—*Domingo Veracierto,* Secretario."

Lo que transcribo á usted para su conocimiento y demás efectos.

Saluda á usted.

PEDRO COSIO.

Señor Director General de Impuestos Directos.

CORRECCIÓN A LA LEY DE IMPUESTO SOBRE HERENCIAS LEGADOS Y DONACIONES.

Poder Legislativo.

El Senado y Cámara de Representantes de la República Oriental del Uruguay, reunidos en Asamblea General,

Decretan:

Artículo 1.° Los descendientes naturales mayores de edad quedan equiparados á los legítimos también mayores de edad, á los efectos de la tasa aplicable á

la parte de herencia, legado ó donación que reciban, y á la cual se refiere la Ley de 16 de Julio de 191.

Art. 2.° Comuníquese, etc.

Sala de Sesiones de la Honorable Cámara de Representantes, en Montevideo á 29 de Agosto de 1912.

MARTÍN SUÁREZ,
Vicepresidente.
JULIO M. CLAVELLI,
Secretario.

ABUNDANT VEGETABLE PRODUCTS IN VENEZUELA FOR DYEING AND TANNING.

By ANDRÉS YBARRA,

Director of the National Association of Agriculturists, Caracas, Venezuela.

It is doubtful if any other subject has been so much discussed, both in scientific and commercial circles, during the past year as the woeful lack of dyes in the manufacturing centers of the Western Hemisphere and in certain sections of Europe. To a great extent there has been also a paucity of desirable materials for tanning purposes. A study of statistics shows that even before the outbreak of war in Europe shut off the supply of dyes almost entirely, the world's demand had been steadily increasing until it had nearly doubled in two decades. Also there was a very material increase in the demand for the raw products with which leather is tanned and subjected to other chemical processes.

The most casual observer, who would have to depend upon secular reading during the past year, must be by this time aware of the real reason for this unusual situation, namely, that one great nation quiety and unostentatiously secured control of one of the world's most necessary commodities. That phase of the subject is intensely interesting, it is well nigh dramatic, but it has no place in the message I bear.

Commendable efforts are being made by scientists in the employ of large commercial concerns; Government experts are exerting themselves, and it is said that substantial offers of awards have been made, both by private enterprise and by Governments, to procure vegetable or chemical colorings as reliable substitutes for what can not now be obtained from usual sources of supply. Because of the evident need for accomplishing the desired results, it does not seem possible that the investigators should overlook the splendid opportunities existing in Venezuela.

There are no less than 27 trees and plants in various sections of Venezuela which are admirably adapted to the manufacture of dependable dyes. They are to be found in abundance; most of them are well known; accessible to innumerable navigable rivers and various railroads; in sections where health can be preserved without risk, and frequently contiguous to towns where there are most of the modern conveniences. While it is possible that some of the least known of these products are in parts of the country remote from modern methods of transportation, there has never been any disposition to dispute that what is worth having is well worth going after. It is not recorded that any valuable exploitation has been made under ideal conditions of comfort. Yet I am convinced that the development of this wonderful industry in Venezuela would be accomplished quite easily and at the minimum of expense.

The plant called "chilca," the scientific name of which is "baccharis polvante," produces a fast yellow color, which the natives have used crudely but successfully for many generations. Also they are familiar with "rubia relbum," the

Spanish name of which is "raicilla," from which is made a beautiful dark red. From what might be called ancient times the "alcapassoso," or "fruto de tinta," has been adapted in making a beautiful deep purple. The "sangrito," the Latin name of which has not been determined, produces what the name implies, the color of blood. The leaves of the "guarema," which also has not been classified scientifically, are purple, and the dye from them is permanent. The "priche," the "anil silvestre," and the "concha de corora," are other names applied by the natives for trees which would have considerable commercial value if attention were paid to them by those whose interests are most vitally involved.

In addition to those just mentioned, there are 19 varieties of trees in Venezuela, all definitely classified, which are adapted to the purpose of making dyes. Those who are familiar with Spanish are sure to recognize some of the following names, and their scientific equivalents will be familiar to those of you who have knowledge of such matters. For example:

Bark of paneque, or *zanthoxylum;* curcuma, or *curcuma longa;* palo de mora, or *charaguancy*, or *maclura tintoria;* brasil, or *hematoxylon brasiletto;* paraguatan, or *cundamines tintoric;* cartan, or *centrolobium robustum;* cuspa, or *galipes cusparia;* naranjillo, or *aspidosperme vargasti;* caruto, or *genipa americana;* onoto, or *bixa crellana;* tocino, or *miconia holosericcs;* gangibrillo, or *elionurus tripsacoides;* conopio, or *reneslmia sylvestris;* echa humo, or *tecoma chrysanthe;* guayabo negro, or *eugenia moritziana;* onotillo, or *vismia ferrugines;* say, or *weimannia balbisiana;* chica, or *bigonia chica;* and campeche, or *hematoxylon campechamino.*

These plants and others adapted to the same purpose are scattered throughout Venezuela, along the many rivers, in the wide reaches of the watersheds and on the mountain slopes, as well as in the higher uplands. Many of them are peculiar to the plains or llanos, of which there are many thousands of square miles.

Exactly the same is true of the almost unlimited varieties of plants containing tannic acid to a greater extent than 25 per cent. This property, so necessary to a great industry that grows with leaps and bounds, is found in the leaf, the fruit, and the bark, and while some of the trees or their products are entirely familiar to the markets, there are scores of them which never have been brought to the attention of the trade. I should not neglect to mention "La Rosa de Montaña," (*barronea grandiceps*); the "alcornoque" (*bravadickia virgilio*); the "jaque negro" (*brosopes cumanerisis*); the "sangre del drago" (*sandragon picracapus dropo*), as among those already qualified and with their botanical names. They are found in abundance along the seacoast, in the many mouths, and along the margins of the great rivers, as, for instance, the Orinoco; and every small river is shaded by plants of these or similar varieties, including the "sangales," the "aricenias," and the "laonucalaides," all of which contain good percentages of tanic acid.

On the plains, or pampas, is the "chaparro," and many others less generally known. Along the banks of the River Orinoco for hundreds of miles are the "curtidor" and the "jobo," while the "yagruno" abounds in the mountains, and a great number of astringent plants in the uplands are very easily explored. Also the "algarrpbo" of astringent bark and fruit, containing from 40 to 50 per cent of tanning product, is found in great quantities and is accessible. The proportion of tanning ingredients in "acacias" and "mimosas" is from 20 to 40 per cent. Many of them already have been qualified, the best known being "macracantha," "tortuosa," "farneceana," "leucanta," "pithecalabain," "uguiscote," and "carocatama." But the best known to the markets is "dividivi," the botanical name of which is *caesalpinia cararia.* The tannic acid and

the galic acid contained in "dividivi" is from 40 to 50 per cent, and still the exportation of this product from Venezuela has been far short of what it should be—from 3,630,000 kilos in 1905–6 to only 6,500,000 in 1910. The exportation of mango bark has been even more inconsiderable and spasmodic, dropping from 12,500,000 kilos in 1907 to 2,500,000 in 1908, 3,000,000 in 1909, and less than 1,000,000 in 1910.

But wholly aside from the commercial feature, which can not fairly be omitted even in a cursory discussion of these vitally important commodities, Venezuela not only includes these opportunities in her vast array of almost totally undeveloped natural resources. She is now and she always has been, in the attitude of offering relief to those who have sought with diligence to solve one of the most perplexing problems that has engaged the serious consideration of the manufacturing and the scientific world.

Gentlemen, I thank you for your courteous attention.

The CHAIRMAN. This completes the presentation of formal papers. It may be that members of the section would like to have some discussion of the subjects of the morning or to ask some questions of the authors of the papers. If not, the Chair will declare the morning session adjourned.

Adjourned at 12.15 o'clock.

JOINT SESSION OF SUBSECTIONS 1 AND 2 OF SECTION V AND SUBSECTION 1 OF SECTION IX.

NEW WILLARD HOTEL,
Monday afternoon, January 3, 1916.

Chairmen: Brig. Gen. W. H. BIXBY, JOHN H. BRASHEAR, ALEXANDER GRAHAM BELL.

The meeting was called to order at 2.30 o'clock by Chairman Bixby.

Papers presented by Section V:

Merchant marine, by Lewis Nixon.

Shallow-draft boat and barge transportation, by Col. L. H. Beach and Lieut. Col. Charles Keller.

Papers presented by Section IX:

Hydroplanes for passenger and freight transportation on inland waters, by Gonzalo Mejía.

Airships to assist in joining North and South America, by Alberto Santos-Dumont.

The CHAIRMAN (Gen. Bixby). Ladies and gentlemen, it was originally intended that this session should discuss only technical subjects. We have found it possible, however, to have this afternoon illustrated lectures, showing the use of the hydroplane and airship. The first paper, however, of the session is of a technical nature, although it does possess popular interest. It has been prepared by Col. Lansing H. Beach and Col. Charles Keller, of the Engineer Corps, and is on the subject of "Shallow-draft boats and barges for river navigation."[1]

The CHAIRMAN. The next paper is on a kindred subject in navigation and can be approached at a little different point of view. I refer to the commercial needs of the country and the methods by which a boat service can be handled and encouraged. These points are brought out in the paper by Mr. Lewis Nixon, of New Brunswick, N. J., on the subject of "Merchant marine."[1]

The CHAIRMAN. Whatever we may think on the subject of creating and developing a merchant marine, so as to establish transportation between the different countries along the Atlantic and Pacific, we are all in favor of developing our commerce. We are all in favor of establishing cooperation between the various countries of North and South America, and, as far as that is concerned, to the whole world.

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[1] This paper is printed in Vol. VI, Engineering, of the Proceedings of the Second Pan American Scientific Congress.

It is sometimes difficult to find the best way of doing it without antagonizing too many interests. We had a very large merchant marine 40 years ago; that is, large in comparison to the merchant marine of other countries. Then it dropped off. Now we have reached a stage where we want to build it up again and where everybody sees the importance of it.

The session will now be presided over by Dr. John Brashear, who has been this last year president of the Society of Mechanical Engineers and director of the Langley Observatory. Dr. Brashear has been interested in astronomical and aerial work for years, and because of his long association with the aviators of this country was placed upon what is known as the Langley Gold Medal Commission, for handling the awarding of prizes to those who have shown the greatest progress in aviation during the year.

Ladies and gentlemen, I take pleasure in presenting as the presiding officer for the next portion of the evening Mr. John Brashear.

Mr. Brashear. Mr. Chairman, ladies and gentlemen, I assure you it affords me a great deal of pleasure to appear before you as a sort of memory of my dear friend, Prof. Langley. It was expected that Dr. Alexander Graham Bell, president of the Langley Gold Medal Association of the Smithsonian Institution, would preside. Dr. Bell expects to be here a little later on to give these good gentlemen a reception.

The memories I have of Prof. Langley, particularly with relation to aerial navigation, extend back for more than 20 years. In fact, I think it was about 20 years ago that he first became interested in the subject of aerial flying, and I can remember very well how that interest was promoted. A gentleman by the name of Lancaster read a paper at the Cleveland meeting of the American Association for the Advancement of Science on the flight of birds—the soaring birds. This gentleman had gone to Florida and had so disguised himself that the vultures and other birds could not see him nor detect him as he climbed up into the trees and watched them through a number of seasons. As he read his paper I can well remember how he was ridiculed. Prof. Langley was, however, deeply interested and immediately undertook to investigate the subject critically, as he did all of his scientific work. I can remember his first apparatus for the testing of many kinds of large-winged birds; his rotating table on which he put a machine that we will call a dynamometer photoplanograph. Sometimes he photographed the results and sometimes they were observed by a cylinder he had. I can remember it very well, because the apparatus was made in the little hall over which I happened to be presiding; and those experiments were carried on, as I say, with the precision of all his astronomical and scientific work. That was

one of the reasons why the committee gave the gold medal to Eifel, who was continuing the work of Langley, and I believe still is at the present time. I regret that I have not time to go through that wonderful history, but am glad to let you know that I have been associated with it so long. I came to this meeting purposely to hear these two papers, which, I am sure, will be most interesting papers. The only regret I have is that our dear friend Langley is not with us.

Two years ago, through the kindness of a good friend who is in the audience to-day, I had the pleasure of taking a flight in a machine. When I was soaring up above the plain at Los Angeles, 2,500 feet above the level of it, looking down over the wonderful scene and sailing around like a bird, with absolutely no fear, ladies and gentlemen, the only thought of your good friend, "Uncle John, of Pittsburgh," as they call me, was that I wished my dear friend Langley were with me. I hope he has wings up yonder, where the disappointment of some newspaper men will not belittle the glory of that splendid man, who was the honored associate of Henry and other illustrious men of the Smithsonian Institution.

I now take great pleasure in introducing to you Dr. Gonzalo Mejía, of Colombia.

HYDROPLANES.

By GONZALO MEJÍA.

Mr. Chairman, Ladies, and Gentlemen: I have come to speak to you in a language that is not my own. I ask your indulgence. Business of a very pressing nature calls me back to my country, but I have laid aside my personal convenience because I believe, rightly or wrongly, that I have something in the nature of a message to deliver, and surely no better occasion to do so could present itself, for Pan Americanism is holding its Second Scientific Congress in Washington to-day, and there are gathered here worthy representatives of each and every one of our American nations.

There is one problem that is common to us all. We have boundless natural resources; we have untold wealth of every description. Nature has lavished her rarest gifts upon us, but in order to bring them forth and to derive from them those benefits which are hers by right, South America must have means of communication. Now, we all know that no network of railways covers the Southern Hemisphere of the New World; that many decades—centuries perhaps—must elapse before they can be built. But if we are without artificial highways, if the rails patiently laid down by the toil of men are lacking, we have a superabundance of natural highways, of mighty rivers, which, with their myriad tributaries, stretch in all directions over the face of our native lands. Hitherto they have been of little use either for intercommunication or for transportation, because our South American rivers abound in shallows and in sand bars, and are mostly navigable only for slow rear-wheel boats of insignificant draft.

This is especially true of my own country, Colombia. Bogotá, the capital, is 700 miles from the shores of the Atlantic, and the only means of communication is the Magdalena River up to Girardot, from where the railroad runs to the

capital. Despite its width, which varies from 1 to 2 miles, the Magdalena offers great difficulties to regular navigation. In the dry season only boats drawing 3 feet of water or less can paddle up it. Its bed and its banks are mostly of shifting sand and progress by night is almost impossible throughout the greater portion of its length. In the rainy season we have an express service of river steamboats that cover the 600 miles from the coast to Girardot in nine days. They leave Baranquilla on Fridays only. The traveler who arrives there on a Saturday must wait till the following Friday to continue his journey to the capital, or he must content himself with a slower boat, making the trip in from 12 to 15 days. To the inconveniences of a slow and tedious voyage must be added the discomforts of a blistering tropical sun, to say nothing of swarms of mosquitoes. So the only people who ever go to Bogotá are those who have urgent business there—Bogotá, a seat of learning and of letters, an intellectual center since the days of the Conquistadores, which, besides its social and artistic attractions, boasts a climate of perpetual spring. Bogotá is a city apart from the world, shut off by lack of means of communication. I believe that every man who has found himself must do or try to do something for his country during his life. As a Colombian, with all the enthusiasm of youth, I determined to try to remedy so disastrous a state of affairs.

The impracticability of building a railway through an undeveloped and difficult country in the present state of Colombia's finances led me to seek a more prompt solution of the problem by building a boat without a keel and drawing little or no water, which would glide over the surface of the river at a high speed and at least carry passengers and mail. I considered that the only way to construct such a craft was to rely on air propulsion. I am not an engineer and I lack the technical knowledge that would have permitted me to undertake the building of such a boat myself. So I wrote to Louis Bleriot, the well-known French aviator, telling him of my idea and offering to place funds at his disposal for the necessary experiments. In 1912 Bleriot built a boat for me that made 45 miles an hour, but it was not a practical commercial success, because it was too light, carried only three people, and was more of a sporting proposition, in which everything had been sacrificed to speed.

The Comte de Lambert, who many years previously had experimented with gliding boats, returned to his researches in 1913 and succeeded in turning out a boat that gave very promising results. About that time I managed to get another boat built, of the type Bonmaison ricochet, by Mr. J. Panchart, which I tried out on the Magdalena River; but it had a submerged screw, and although it could make the trip from Baranquilla to Girardot in 24 hours, this experiment convinced me that the submerged screw must be dispensed with altogether for that purpose. In 1914 I went back to Paris to get the Comte de Lambert to build me some air-propelled gliding boats. The war broke out and I had to abandon my work in Europe and come to the United States, where I arranged with Mr. D. La Chappelle to build the *Yolanda II*, which I have recently tried out, and with full success, on the Hudson River. With this boat the distance from Baranquilla to Girardot can now be covered in less than 24 hours. You could go from Buenos Aires to La Asuncion in 30 hours, or from the mouth of the Orinoco to San Fernando de Apure in 50 hours.

The *Yolanda II* is a raftlike boat made of six separate pontoons, five of which form the main deck that is about 20 feet square. The sixth pontoon is smaller, is placed in front, and carries the rudder that is connected to an ordinary automobile steering wheel. The boat obeys the driver as easily as any car and is absolutely safe because the pontoons are full of kapok, which makes it unsinkable. In the center of the 20-foot deck is a big automobile body containing a seat for the driver and 10 comfortable wicker chairs. At the rear

of the deck are mounted two powerful air propellers like those used on the battle planes of the armies in Europe, each with its own 130-horsepower gasoline engine. These revolve at 1,200 revolutions per minute. As soon as the motors are started the boat seems to try to rise from the water, and as the speed increases she glides across the surface. The faster the speed, the nearer the approach to the sensation of sliding over the ice. Gliding over the water has been described by one of the newspaper men who accompanied me on my trial trip from Nyack to New York as not quite flying, but something far better than motoring.

However, I do not wish to weary you with descriptions of the boat itself, which I shall show you in a few minutes in moving pictures. I know that the *Yolanda II* is only a small beginning, but I know also that it is a boat that has glided across the surface of the Hudson at 40 miles an hour with a dozen people on board. If she were fitted with lighter engines (those I now have weigh more than a ton) she could easily make 50 miles an hour. I wish to impress upon you my belief, my conviction, that the development of this small beginning presents unforeseen potentialities. I am well aware that air-propelled boats are no new thing. Many times the air propeller has been experimented with and abandoned, as it proved to be entirely inferior in efficiency to the submerged screw for the ordinary type of vessel. That is true for the slower speed, but the demand for speed has kept on increasing and has led to the evolution of the hydroplane. The experience has shown that the practical speed limit of the submerged screw for hydroplanes has been nearly, if not quite, reached.

As the air-propelled gliding boats only have to overcome air resistance, and the surface friction of water, the increase in their size and speed calls for no such enormous increase in motor force as is the case with ordinary boats which have to cleave their way through the water as they proceed; or even as is the case with regular hydroplanes, the resistance of the water to the submerged screws and shafts of which offset the advantages gained by their gliding qualities. It is a demonstrated fact that at all speeds over 40 miles per hour the air propeller is more efficient than the water propeller for the gliding boats. Here in the United States, in 1915, the record with a regular submerged screw hydroplane was 59 miles an hour and needed 750 horsepower. In France, Paul Tissandier, in 1913, made 60 miles an hour (98 kilometers) in an air-propelled boat with 160 horsepower.

The advance of civilization with all the material prosperity that modern development brings in its train depends upon ease and rapidity of communication. All of that fabulously rich but actually railroadless continent that we South Americans love and cherish can be transformed, almost overnight, by the use of rapid air-propelled gliding boats, into one of the portions of the earth best provided with means of communication. And the day when we will ascend all the rivers of South America at 40, 50, or 60 miles an hour—a thing that can be done—the whole world will marvel, we South Americans will marvel, at the natural wealth hidden in our native countries. And there is no better field for American industry and for American enterprise than the manufacture of this type of boat, the demand for which will be unlimited and the construction of which I come here to throw open to all. I might have worked in silence. Now that I have succeeded I might have taken my boat to Colombia, perfecting and protecting my idea as I went, with no other object than the making of money. But I have had no such aim. The spirit in which I come before you is not that of one who seeks to advertise his goods. My aim is far higher. I welcome others to the field. My little knowledge and experience are at the disposal of all. My sole desire is to see air-propelled gliding boats brought to the highest state of perfection with as little delay as possible.

The possibility of building safe and practical air-propelled gliding boats that travel over the surface of the water without any draft is not a theory—it is a fact. There is the *Yolanda II* that I have taken up and down the Hudson River, starting from Nyack, where for months the whole population had gathered to watch my trials. I have had on board his excellency, the minister of Colombia, Señor Don Julio Betancourt, who can bear me witness. With a number of other gentlemen we came down from Nyack to Eighty-sixth Street landing, New York, a distance of 22 miles, in 35 minutes. I had intended to show you that trip in moving pictures, but unfortunately there is some trouble with the machine and I can not show it.

I have delivered my message. It amounts to this:

Latin Americans, here is a man who believes with such a conviction as to have devoted four years of his life and resources to his ideal that your rivers can be changed into splendid roads, roads with the surface of a speedway and never a hill to climb; roads that will show no signs of wear, no matter how heavy the traffic. This gives you the one thing you lack—means of communication.

North Americans, here is a new and untold field of enterprise and an opportunity for the inventive genius and constructive ability of your great United States—a field that will bring, I believe, wealth to you and prosperity to your sister Republics.

North Americans, Latin Americans, United Pan Americans, give a thought, give a careful thought, to the potentialities of this small beginning. It may become an instrument of progress. I may be compelled to stop before reaching the promised land, but I do not want my ideal lost. Give it a thought, and if I should be wrong, the only thing you can lose is your valuable time, and no more. If I be right, you may be able to serve the Americas, your world.

Here, as in everything else, the interests of North and South America are identical. They do not clash. They never ought to be allowed to clash. This is the time when the unification of all of the interests of the New World is uppermost in the minds of thinking men. The Pan American Union is the outward and visible sign of the inward and spiritual bond that binds us all into one homogeneous brotherhood of nations.

That is my conception of Pan Americanism, and that is why I have come to address you.

The Chairman. Ladies and gentlemen, I felt it a sort of duty as well as a very great pleasure to write a New Year's letter to my good friend of 40 years, Andrew Carnegie, at the beautiful Pan American building. In it I told him that while this was supposed to be a Pan American scientific congress, that the peroration and conclusion of every address, engineering, scientific, or what not, expressed a feeling of fellowship and brotherhood and of everything that stands for the unity of the South and North American States. We have had it exemplified here.

Ladies and gentlemen, on the 24th of January last I sat in the building, on Dye Street, of the American Bell Telephone Co. I had in my hand a receiver, and the friend I am going to introduce had a replica of the original instrument over which he sent the first telephone message. We were connected up by wire 3,000 miles in length. I do not think that you will hear him any plainer than I did on that

wonderful day when the Atlantic and Pacific were connected together. My good friend, Dr. Alexander Graham Bell, the president of the Langley Gold Medal Association of the Smithsonian Institution, will take my place in the chair. Dr. Bell, we are glad to see you.

The CHAIRMAN (Dr. Alexander Graham Bell). I am sure we are all gratified to have had presiding upon this occasion Dr. Brashear, a man of many titles, but with one at least significant to us—"Friend of Langley," pioneer of aviation, who taught the world what to do, although he never saw a flying machine in the air.

It is very gratifying, when we look over the progress of the past, to see what the Americans have done in forwarding aerial locomotion. Aerial locomotion, though the dream of ages, has been left to the twentieth century to be accomplished. In fact, the twentieth century had hardly opened when the dirigible balloon that had been so long sought after and which had given great promise, but had not yet been successful, had at last made its appearance. In 1901 the world was startled by the successful construction of a dirigible balloon which went around the Eifel Tower and returned to the place from which it started—an achievement presented to the world by a Brazilian, Mr. Santos-Dumont. That was really the beginning of the dirigible balloons of the twentieth century and the Zeppelins that we hear so much of. Mr. Santos-Dumont was not content, however, in being the first to attract the attention of the world in this way, but in 1906 he was the first to fly in public with a heavier-than-air flying machine.

It is true that both in the matter of dirigible balloons and in the matter of flying machines others had been previously working, generally in secret. In our own country the Wright brothers had flown, but no one knew what they were doing. It was all kept in secret. It was not until September, 1908, that the Wright brothers flew in public. So that, if we look back to the progress of aerial locomotion in the twentieth century, to find out to whom the world is indebted for the origination of this modern movement that has given us the practical conquest of the air, we go back for the dirigible balloon to the public exhibitions of Mr. Santos-Dumont in 1901 and to his exhibitions of heavier-than-air machine flying in 1906.

Brazil, in the person of Santos-Dumont, has contributed notably to the development of aerial locomotion, and I am sure that we are very glad to welcome here to-night so distinguished and eminent a gentleman.

Gen. BIXBY. Ladies and gentlemen, before Mr. Santos-Dumont begins this lecture I wish to announce that this is an unusual honor—a special honor—that you are receiving, since this is the first public address of Mr. Santos-Dumont on this great subject.

HOW THE AEROPLANE MAY EFFECT CLOSER ALLIANCE OF THE SOUTH AMERICAN COUNTRIES WITH THE UNITED STATES.

By ALBERTO SANTOS-DUMONT.

Because of the difficult geographical conditions in the continent of South America, which have made railroads in many regions impossible and have militated against adequate transportation and communication, that closer union of the States of the Western Hemisphere which has been so desirable has been handicapped and hindered. Important cities located at high altitudes have been isolated by the lack of railroads and means of efficient communication. Some, indeed, seem practically out of touch with modern civilization. Because of the long and tedious distance from the United States and the extensive period of time required to cover the distance by steamship, that closer alliance of the South American countries with the United States which has been likewise so desirable has been retarded. To people living in the United States, Brazil, Argentina, and the other countries of South America seem inaccessible and remote. To us who have lived in South America, New York seems more distant than Paris. A gulf of time and distance has separated us. It has impeded the development of profitable business relations. With the trade of the world affected by the European war, the development of commerce between the two continents has become of more urgent importance.

The countries of this hemisphere are of one family. To-day they are like the members of a family, who live in different houses, in a state of estrangement. The peace, strength, and well-being of a family depend upon close association, understanding, sympathy, interchange of views, cooperation, and cordial and friendly good will. For the greater development and strength of the countries of this hemisphere a closer association, a closer interchange of views and better facilities for communication and trading relations are vitally necessary. Who knows when some European power may menace an American State? Who can tell if, in the aftermath of the present European war, some power may not reach out to grasp territory in South America? Is war between the United States and an European power to be regarded as absolutely improbable? A more firmly knit alliance between the United States and her southern neighbors would mean a greater and more formidable strength.

I have spoken of the difficulties that have retarded the development of commerce, better facilities in transportation and communication and the fostering of friendly relations. I believe these difficulties are about to be overcome. I feel certain that the present obstacles in time and distance will be surmounted. The isolated cities of South America will be brought into touch with the world of the day. Separated countries will meet despite the barriers of mountains, rivers, and forests. The United States and the countries of South America will be brought together as closely as are England and France. The distance from New York to Buenos Aires, which is now over 20 days by steamship, will be abbreviated to a trip of a few days. With time and distance annihilated the commercial relations, so long deferred, will spontaneously develop. We shall have facilities for prompt communication. We shall get into closer contact. We shall become stronger in the bonds of understanding and friendship.

All this, gentlemen, will, I believe be effected by the aeroplane. I do not think many years will pass before there will be established aeroplane services between the great cities of the United States and the capitals of South American countries. With a Government-owned aeroplane mail service, communication between the two continents will be cut from 20 days to two or three days. The transportation of passengers between New York and the remote points

in South America is not impossible. Yes, gentlemen, I believe the modern improved aeroplane will solve the problems with which we have struggled for years. I believe the aeroplane will knit the various States of the continent into an integrally united, cooperating, and friendly combination, allied for their own well being in trade and commerce as well as for strength in times of possible war.

Last May or June, while I was in Europe, I received a gracious invitation from the governors of the Aero Club of America to come to the United States as their guest in order to confer with them on the problem of bringing the Pan American nations nearer to one another by means of aerial navigation. I was much honored and pleased, and so wrote to the governors of the club, telling them how heartily I commended their idea. I deeply regretted at the time that I could not at once respond, as I had been invited by my friend, M. di Soriano, the great sportsman, who holds all power-boat records, to cruise with him on his yacht in the north of Spain. Because of my previous acceptance, I was compelled to postpone responding to the invitation of the governors of the Aero Club and delay my visit to the United States until October.

Is the possibility of aerial navigation between the United States and the South American countries merely a fantastic speculation? Personally, I believe that aerial navigation will be used for the transportation of mail, and passengers as well, between the two continents, and that, perhaps, very soon. Some of you may shake your heads incredulously and smile at this prediction; yet 12 years ago when I said that aerial machines would take an important part in the waging of future wars people likewise shook their heads and smiled. On the 14th of July, 1903, I flew over the great Longschamps military revue. One hundred thousand soldiers took part in this revue; there were from 300,000 to 400,000 spectators. That was the first time aerial navigation was a feature of a military demonstration. At that time I predicted that aerial warfare would be one of the most important phases of future military campaigns. My prediction was scoffed at and resented by militarists, who could not see the airship in any light but as a childish toy. They would not discuss it seriously; but consider what has happened since then. Consider the invaluable work the aeroplane has done during the present war for the contending armies. Aviation has revolutionized warfare. Cavalry, which was regarded as of such momentous importance, has passed. In his book on "Cavalry," Bernhardi declared cavalry was of supreme importance. Before the present war, Sir John French, who for more than a year commanded the British forces at the front, wrote a preface to the English edition of Bernhardi's book, emphasizing the authority of Bernhardi and urging England to develop her cavalry. What has happened since the war? Cavalry has given way; aviation has taken its place.

The aeroplane has proved of supreme importance in reconnoissance. From the aeroplane air scouts can locate the position of an enemy's trenches; they can observe the enemy's movements—the transportation of guns, ammunition, and troops; they can locate the enemy's batteries and anticipate offensive movements. From aeroplanes, by wireless and by signaling, they can direct the fire of their forces. By information sent by wireless from aerial scouts, great guns can be accurately directed against an enemy's trenches or his batteries. The air scout is of more value in the defense of coasts than cruisers. He is not so easy a mark for the enemy's guns. He is beyond the target of the enemies submarine. He can, from his vantage point, observe the approach of an enemy fleet and by wireless warn his own fleet. He can detect submarines and destroy them. In Europe they have now developed an invisible aeroplane, the wings of which are made of a new material transparent as glass. At the height of 3,000 feet this

machine can hardly be seen. Aviation has proven the most effective weapon in warfare, both in offensive and defensive campaigns.

Since the beginning of the war the development of the aeroplane—in the aeroplane itself, in motors, and aeroplane guns—has been marvelous. Who, five years ago, would have believed that aeroplanes could be used to attack hostile forces—that cannon bullets could be sent, with deadly effect, upon an enemy from the inaccessible heights of the air? Since the beginning of the war, machines have been improved. They have been increased in size, and some are now made all of steel. Motors have also undergone a steady improvement. The most amazing thing has been in the development of the aeroplane gun. At first the recoil of guns in shooting constituted the most serious difficulty in regard to attacks from the air. The repeated and sudden shock of recoil in firing even small guns very soon shattered the fragile structure of the aeroplane thus used and put it out of order. This impediment has now been overcome. A new gun has been invented which gives no recoil. This gun consists of a tube, in which two shots are simultaneously discharged by a single explosion. At the moment of firing, one shot—the deadly steel shell—speeds down toward the enemy; a second shot, which is made of sand, is discharged backwards. Thus two discharges are made at once, with the result that there is no recoil in the guns. At the beginning of the war the shot used from aeroplanes, from guns which recoiled in firing, was small. I understand that in this new gun they are using 9-centimeter shells. Imagine the effectiveness of this terrific cannon fire from aeroplanes. This alone serves as an illustration of the quick progress made in aerial navigation for warfare.

Gentlemen, if the aeroplane has proven itself so useful in the conduct of war, how much more useful should it not be in times of peace. If war has served as an incentive in this amazing development, how much greater to scientists and inventors should be the incentive to develop the aeroplane that it may serve the nations in pursuits of commerce and the development of friendly international relations.

Less than a decade ago my aeroplane was considered a marvel. In this machine, in which there was a place for only one person, I used a motor of about 20 horsepower. At first I was only able to fly a few meters and then a few kilometers. My record was a 12-mile flight. I could carry only enough gasoline to fly three-quarters of an hour.

At that time the aeroplane was regarded as a sort of toy. No one could have believed it possible for aviation to develop to the degree it has in the present day. Then we went out to fly only when there was no wind, usually after sunrise or sunset, when a handkerchief would not move in the air. People believed that an aeroplane could fly only when there was no wind.

To-day machines are being made capable of carrying 30 passengers, of traveling in the air for hours, of making nearly 1,000 miles without touching ground, and which are driven by 1,000-horsepower motors. An aeroplane has been up in the air as high as 26,260 feet and has flown, without touching the earth for 24 hours, 12 minutes; and from sunrise to sunset an aeroplane has traveled 1,300 miles. We no longer fear wind or weather. The modern machine can brave any gale and fly through a storm of any velocity, and can also rise above the regions of storms. Even now the aeroplane is still in its infancy.

In a short period of 10 years the aeroplane has developed more rapidly than did the automobile. With the aeroplane we can now travel over 140 miles an hour. For commercial purposes and for international communication both railroad and automobiles reach a point where their utility ends. Mountains, forests, rivers, and seas block their progress, but the air affords an unhindered speedway

to the aeroplane; it can travel over mountains, forests, and seas; it can unite continents. The atmosphere is our ocean and we have ports everywhere.

I, who am myself somewhat of a dreamer, never anticipated what I beheld recently when I visited an enormous factory in the United States. There I saw thousands of skilled mechanics engaged in the building of aeroplanes, of which from 12 to 18 are finished daily. To expedite the shipments of these machines railroad sidings have been constructed into the factories themselves. To me the scene looked more like a dream than a reality, for among the aeroplanes constructed there is one capable of flying over 600 miles and carrying 30 people.

To illustrate further the possibilities and future of the aeroplane, I would like to describe this new machine. This aeroplane is six times larger than any yet tried. It can carry sufficient gasoline to give it a cruising range of more than 600 miles at a speed of 75 miles an hour. By decreasing the load, so as to increase the fuel capacity, this distance can be greatly increased. The power plant consists of seven motors—six of 160 horsepower each and one of 40 horsepower. With about eight passengers this machine has a further capacity for carrying 700 gallons of gasoline, 60 gallons of oil, and a useful load of 3,000 pounds. By decreasing the 3,000-pound cargo the number of passengers can be approximately increased to over 30.

This machine is built with three planes, spreading 133 feet. The length is 68 feet; the rudder area 54 square feet; fixed tail area, horizontal, 126 square feet. The weight of the hull and planes is 8,000 pounds and of the motors 4,000 pounds. With a crew of eight men, weighing 1,200 pounds; oil and gasoline weighing 5,250 pounds; and a load, presumably of ammunition, of 3,000 pounds, there is a total weight which can be carried through the air of 21,000 pounds, or over 10 tons. This is unprecedented.

This new machine presents several significant and valuable aspects. The 1,000-horsepower motors drive three propellers. Two tractor screws are set at either side of the boat hull in front and one pusher screw is set amidship in the rear. Once an altitude is gained, two of these propellers enable the boat to sail at an even keel. In descending, it is said that the boat can be propelled by a single motor, maintaining a gliding angle of about 15 to 1, enabling it, if desirable, in descending from a height of 2 miles, to traverse 30 miles of land. Armored in all the vital spots, capable of flying nearly 700 miles, of carrying the new aeroplane gun projecting 9-centimeter shells, you can understand what a formidable aerial dreadnaught is being turned out for effective work on the battle front in Europe.

Developed by the needs and exigencies of warfare, this same machine, diverted from purposes of destruction, will prove of incalculable value as an instrument in the useful pursuits of the race. At the present time it is quite possible that one of these aeroplanes could make the trip between New York and Valparaiso or between Washington and Rio Janeiro. A stopping station for the taking on of supplies of fuel could be arranged every 600 miles.

The chief problem confronting aerial navigation lies in the improvement of the motor. Frankly, the present motor is not yet what it should be. The aeroplane itself has developed more quickly than the motor. The aeroplane motor to-day is as unreliable as the automobile motor was 15 to 20 years ago. In the early days of the automobile you could not go out driving without having trouble with the carburetor or the ignition apparatus. The magneto was not yet discovered. Now you can go out driving in a car and travel many thousands of miles without a breakdown. With the exception of the pneumatic tires, which are still in their infancy, I have had no trouble with my last car for three years. Nevertheless, I believe that the aeroplane motor will be developed to such a degree that it will give no more difficulty than the motors of

the best and most modern automobile made. At present the motor of an aeroplane must be comparatively light, while at the same time it is subject to constant work. With the automobile you can give the motor periods of rest. Arriving at the top of a hill you can shut the motor off while the car goes down. This is not possible with the aeroplane. I believe the problem will soon be solved. Already steel has been improved and made stronger by special processes. No one can say how far we can go in strengthening steel. If scientists like Edison, Tesla, Henry Wise Wood, Sperry, and Curtiss devoted their attention to this subject a thoroughly satisfactory motor, I am sure, would be speedily perfected.

Mr. Curtiss has already done for practical aviation more than anyone in the world. He developed the hydroaeroplane first, then the flying boat, then the two-motor air yacht *America*, then the *Super-America;* now he is building the large air yacht which I have already mentioned. Mr. Curtiss himself was the first man to successfully fly an aeroplane from the water and alight on the same element.

Another difficulty confronts aerial navigation. This is the problem of finding one's position in an aeroplane. We use the compass, but the compass is not sufficient. The captain of a steamship uses both compass and sextant. Traveling high over the land in an aeroplane, the aeronaut can not use the sextant, as he has no level horizon. In an aeroplane we do not know accurately enough the height at which we are flying, and for astronomical calculations with a sextant accurate knowledge of one's height is necessary. I believe that a kind of artificial horizon, made with a mirror held horizontally by a gyroscope, will solve this problem. In the scientific application of the gyroscope a scientist has achieved marvelous results. Not only can an aeroplane be now automatically controlled by the gyroscope, but also a big steamer. Perhaps the majority of you here present have suffered from seasickness. Perhaps you will be astonished and happy to learn that the cause of seasickness in the rocking of ships has been removed. Mr. Sperry's perfection of the gyroscope enables great ships to remain still in the midst of storms. While the gyroscope has not been adopted commercially on passenger ships, some of the new United States men-of-war are now fitted with them. Thus they remain steady in the fiercest seas and can take accurate aim with their guns.

With an improved motor and efficient means of guiding one's course, the aeroplane is certainly destined to figure as one of the most effective mediums in the development of commerce and the welding together of nations that lie far distances apart.

Countries in which well-made roads did not exist were the first, I believe, to adopt the railroad and steam engine. The development of the United States has followed in the wake of the railroad. If it were not possible for people to travel quickly by railroad from Texas to Chicago, from San Francisco to New York, the closely welded union that exists between the States would not be possible. The railroad has brought distant places close to one another. Railroads are the nerves and arteries of the United States. In the new countries of South America there are not many railroads. In fact, because of precipitous mountain ranges and vast rivers, railroads have not been possible. The countries of South America have remained isolated and apart because of this. There are cities so high no railroads can reach them. Indeed, there are hardly roads of any kind. To these cities the aeroplane would bring civilization and progress. Aeroplanes could carry mails between them and other South American cities. Commercial relations could be effected. Passengers might be carried, for instance, between Quito and San Diego. I foresee a time when there will be established regular aeroplane services between all the South American cities.

I believe these countries, lacking railroads, will be the first to adopt aerial navigation. This will inevitably bring about a more intimate union between these countries.

I should not be surprised if, in a few years, there will be aeroplane lines operating between the cities of the United States and South America. At the present time business relations can not develop because of the long time required in traveling and the delay of mails. An aeroplane mail service would facilitate commerce. Whereas it takes a steamship over 20 days to go to South America, an aeroplane would make the trip in 3 or 4 days. Men engaged in export and import trade having big deals in hand could have agents make the trip in four days, closing the contracts that under present conditions must pend during the transit of mail communications from 20 to 40 days and more. The diplomatic relations between the Governments of Washington and the South American countries would be more intimately established. New York could have the newspapers of South American capitals on the newsstands just as Chicago and Philadelphia papers are now on sale. People in South America would similarly become acquainted with the life and news of the metropoli of the United States, and the people of New York, Boston, Philadelphia, and Washington would know what is going on in South American cities. The literature of the various nations would be exchanged and we should learn to see the point of view of the different countries.

Besides the strength that is to be gained by a closer alliance of the South American countries among themselves and also with the United States, there is another point to which I would draw your attention. All the European countries are old enemies. Here in the new world we should all be friends. We should be able, in case of trouble, to intimidate any European power contemplating war against any one of us, not by guns, of which we have so few, but by the strength of our union. In case of war with any European power neither the United States nor the great South American countries could, under present conditions, adequately protect their extensive coasts. It would be impossible to patrol the shore of Brazil and Argentina with a seagoing fleet. Only a fleet of great aeroplanes, flying 200 kilometers an hour, could patrol these long coasts. Scouting aeroplanes could detect the approach of hostile fleets and warn their own battleships for action. One of the most powerful means of protection would be in such squadrons of aeroplanes, owned by the Governments of the United States and the various South American countries. In case of war these aeroplane fleets would enable the United States and South American countries to operate as allies in protecting their coast lines. Am I speaking of an impossibility?

Remember that, 10 years ago, when I came to the United States with my 20-horsepower airship, no one would talk seriously about aerial navigation. We now see what the aeroplane has done in Europe in taking observations, directing battles and the movements of troops, in attacking the enemy, and in the protection of coasts.

Close association is necessary for the development of mutual understanding and friendship between nations as well as among human beings. Having already attained a speed 5 to 10 times that of the fastest steamboat, the aeroplane, as soon as motors are improved, will undoubtedly bring the two continents closer and thus effect an indissoluble alliance. With a record now of over 200 kilometers an hour, I believe that in a few years the aeroplane will make 300 to 400 kilometers an hour. This would bring the most distant places in South America within one or two days' journey from New York.

Up to the present, time and distance have separated the Americas. In the ancient days, when there were no means of communication between the small

States and tribes of Europe, enmities and racial hatreds were born and fostered by wars which have survived the centuries and which, developing through the generations, have found their most terrible climax in the present war. Let us hope that, by means of the aeroplane, the barrier of distance and lack of communication between the United States and South America, which so often develops into misunderstandings, may be utterly overcome, with the result that for all future time the nations of the new world may abide in cordial and cooperating concord. Lack of communication in the old days is the basic cause of a disunited and fighting Europe. Let us hope aerial navigation will effect a permanently united and friendly America.

The Ambassador from Brazil. Mr. Chairman, ladies and gentlemen, you need not fear that I will take your time very long. I am known as a brief speaker, and, besides, it will be a case of conscience for me to take your time. I have been hearing speakers and papers read since this morning. It is also a kind of personal feeling which makes me go into the matter directly. I received a letter just now requesting me to make an announcement here, and I think you will agree with me that it is a very important one, and that it is more or less in the spirit of this so-much-spoken-about Pan Americanism. This is a letter from the president of the Aero Club of America:

Exmo. Sr. Domicio da Gama,

Ambassador from Brazil, Washington, D. C.

My Dear Sir: It is a source of extreme regret to me that I can not be present with you to-day to hear the admirable address of your illustrious inventor and sportsman, Mr. Alberto Santos-Dumont, which I have just read. I heartily approve the sentiment expressed by Mr. Santos-Dumont, and in the name of the Aero Club of America and the 27 affiliated aero clubs approve the plan proposed.

We believe with Mr. Santos-Dumont that these aeroplanes of to-day which already make it possible to carry a dozen passengers and a ton of useful load at a speed of 85 miles per hour can solve most difficult problems of transportation, and that if applied for this purpose as well as for sport in and between the nations of the Western Hemisphere, they will become one of the most effective factors in bringing these nations into closer and most friendly alliance. In the words of Mr. Santos-Dumont, " the aeroplane will knit the States of the Western Hemisphere into an integrally united, cooperating, and friendly combination, allied for their well-being in sport, trade, and commerce, as well as for strength in times of possible war."

There are thousands of places not connected by railways or roads right in the United States, and there must be tens of thousands on the Western Hemisphere, where aeroplanes could transport mail and "express" merchandise at a fraction of the time required at the present time. Taking only two instances from a plan outlined by the United States Post Office, the aeroplane makes it possible to carry mail between Albany, N. Y., and Lake Placid, N. Y., in a district most closely connected by railways, in 2 hours and 15 minutes, whereas it now takes 8 hours and 10 minutes; between Santa Maria and Maricopa, Cal., the aeroplane can deliver the mail in 1 hour, where it now takes 15 hours and 10 minutes.

This is made possible by the fact that the aeroplane can travel in straight line, by the shortest route, and makes every place an aerial port. All other vehicles must follow roads, and they are handicapped wherever there are no roads.

For this reason we may well expect that there will soon be thousands of aeroplanes in use for peaceful purposes on this continent, which will form a valuable aeronautical reserve to be available for the protection of the countries of the Western Hemisphere. Dispatches from Europe make us realize daily that, whereas air craft are the deciding factors and the most effective weapons against submarines, had the nations of the Western Hemisphere 10,000 aeroplanes in use for port and commercial purposes this continent could be well protected against unpleasant contingencies.

Appreciating these truths, and concurring heartily in the sentiment expressed by Mr. Santos-Dumont, the Aero Club of America wishes to assist in hastening the coming of the day when we may travel in the air from Rio de Janeiro to New York, and vice versa, making the trip in a few days, and to bring the people of this continent into closer relation through sport. As a first step, we take pleasure in announcing through you the offer of a $5,000 Pan American aviation trophy to be competed for annually by the representatives of the nations of the Western Hemisphere, under the rules to be made by a committee of representatives of these nations, the first competition to take place at Rio de Janeiro as soon as possible. The following competitions may take place in the countries represented by the successful winners of the trophy. A cash prize of $5,000 is offered with the trophy to go to the winner of the first competition.

The aviators who will fly in this race will be pioneers, who will, in the name of sport, open the aerial highways for the people of this continent to travel in. It is to be hoped, therefore, that each country will give hearty cooperation in the carrying out of this project.

The conquest of the air through dynamic flight has been made possible by Americans. The Wright brothers, who made the first flight; your illustrious inventor and sportsman, Alberto Santos-Dumont, who, after demonstrating to Europe that the air could be navigated with dirigibles, evolved an aeroplane and made the first flight ever made in Europe and the first public flight ever made in the world; Glenn H. Curtis, the father of marine flying; Chavez and Bielovucci, who, by flying over the Alps, led the way to the conquest of the mountains; all these pioneers are Americans. Through them the New World has given the Old World wings, a suitable return for the gift of civilization. Santos-Dumont's flight near Paris, Wilbur Wright's flight at Auvours, Chavez's and Bielovucci's flights over the Alps, Curtis's flights with the hydroplane and the flying boat in Europe—each of these events may be considered by posterity as being as significant as the discovery of this continent by Columbus.

Assuring you again of the hearty cooperation of the Aero Club of America and its affiliated aero clubs in fostering the development of Pan American aeronautics, I beg to remain,

Yours, very truly,

ALAN R. HAWLEY,
President Aero Club of America.

The CHAIRMAN (Dr. Alexander Graham Bell). I am sure that Mr. Santos-Dumont is to be congratulated upon the great success of this, his maiden flight. We know how his predictions of the use of aeroplanes in war have come too true, and I am sure I express the sentiment of this audience that we wish most heartily that his predictions that the aeroplanes may be of equal use in peace, may be true and serve to bring closer together the American nations.

Mr. Brashear. I would like just a moment to pay a tribute to my friend Langley.

The Chairman. Dr. Brashear has the floor for a moment.

Mr. Brashear. About three years after Prof. Langley commenced his work in aviation he sent a messenger for me, asking me to come over, as he thought he had made a wonderful discovery. I went over to dinner and sat down with him. He was quite excited. He said, "I believe I have found a way to stabilize the flying machine." He said that he thought he had it in the very instrument that our good friend Mr. Sperry has developed to such a wonderful extent. So, I wish to pay this tribute to Mr. Langley. It was he who suggested—I do not know that Mr. Sperry knew anything about it—that the gyroscope would be used for stabilizing. That suggestion came from my good friend Langley 20 years ago, and I hope you will all give him credit for it.

Hereupon, at 5.45 o'clock, the session adjourned.

JOINT SESSION OF SUBSECTIONS 2, 3, AND 4 OF SECTION IX.

NEW WILLARD HOTEL,
Monday afternoon, January 3, 1916.

Honorary Chairman, MANUEL GAMIO.
Chairman, EDWIN R. A. SELIGMAN.

The meeting was called to order at 3.25 o'clock by Chairman Seligman.

The CHAIRMAN. We shall start with a paper by Dr. Rafael Guirola, ex-secretary of the treasury of Salvador, who will read us a paper on "Commerce between the United States and Central America."

COMERCIO ENTRE ESTADOS UNIDOS Y CENTRO AMÉRICA.

Por RAFAEL GUIROLA D.,
Ex-Ministro de Hacienda, Crédito Público, Fomento, etc., de la República de El Salvador.

Invitado por el Instituto Carnegie para asistir como huésped de honor a esta magna Asamblea, cumple a mi deber dar público testimonio de alto respeto y profunda gratitud hacia esa benemérita Institución que me dispensó tan señalado homenaje, proporcionándome la grata oportunidad de exponer a los ilustres congresistas, dentro de los reducidos límites de un obligado resumen, mis ideas concretas en orden a las relaciones de índole comercial y económicas que deben existir entre los cinco países hermanos de Centro América—que para mi espíritu patriótico constituyen una sola y fecunda nacionalidad—y la pujante República Americana, llamada a tan halagüeños destinos.

Inscrito mi nombre en la Sección IX del Congreso, que se refiere a las delicadas e importantes materias de "Transporte, Comercio, Finanzas e Impuestos," esta breve exposición seguirá el orden trazado en el Programa.

TRANSPORTES.

Si Estados Unidos anhelan ensanchar su comercio en los países del istmo centroamericano, tienen, ante todo, que prestar preferente atención al importante tema de las vías de comunicación marítimas.

Bastante expedición existe tratándose de Europa, con la cual es fácil y hacedero el intercambio de productos; pero con Estados Unidos, los mejores deseos se han desvanecido ante la ausencia de un medio regular y constante de transporte.

Para remediar esa deficiencia, harto dolorosa, sugiero estos medios, de naturaleza esencialmente práctica:

I.—Un alto deber de conveniencia continental aconseja a Estados Unidos acordar una prudente rebaja a los impuestos de *tonelaje* señalados por el

tránsito de buques mercantes al través del Canal de Panamá. Actualmente, esos impuestos aun se mantienen muy elevados.

Esa obra gigantesca, producto del genio norteamericano, debe considerarse como un fuerte atalaya, que está pregonando al mundo la fraternidad de América. No es dable, pues, que, en el presente ni el porvenir, se convierta en objeto de especulación.

II. Urge establecer líneas de navegación, estimulando su desarrollo, mediante todo apoyo moral y pecuniario.

Nadie ignora que Inglaterra y Alemania se han atraído el comercio mundial prestando con largueża todo apoyo oficial a sus líneas de vapores, que recorrieron triunfalmente los mares hasta que abandonados los serenos caminos de la fraternidad—por obra quizá de una rivalidad comercial—se lanzaron a la más pavorosa de las guerras.

Que Centro América y Estados Unidos subvencionen líneas de vapores, las cuales al propio tiempo que satisfagan las necesidades crecientes del comercio, sean las mensajeras de una cordialidad más íntima y estrecha. La subvención podría ser proporcional a la importación y exportación de cada país contribuyente.

Hasta ahora, en lo que respecta a Centro América, esos servicios han sido deficientes, gravosos e irregulares, al grado de que desde que estalló la conflagración europea se ha hecho sentir la ausencia de los pocos vapores alemanes e ingleses que recorrían las costas centroamericanas. Y terminada la guerra, volverán esos buques mercantes a desempeñar importante papel en nuestra vida comercial, si antes Estados Unidos, de acuerdo con las Repúblicas de Centro América, no escogitan medios prácticos para establecer buenas líneas de vapores americanos, al amparo de esa corriente de viva simpatía que une a los pueblos de este continente.

FERROCARRILES.

Centro América tiene ya dos ferrocarriles que cruzan su territorio del Pacífico al Atlántico: el de San José a Puerto Barrios, en Guatemala, y el de Puntarenas a Limón, en Costa Rica. En Honduras y Nicaragua hay tendencia a construir vías semejantes; y, en lo que a El Salvador toca, apenas falta que construir el trazo que unirá la ciudad salvadoreña de Santa Ana con la de Zacapa, en Guatemala, para que sea una verdad tangible la commuicación interocéanica.

Y entonces, la Unión política de Centro América vendrá como la resultante natural de ese intercambio constante de ideas, sentimientos y productos; pues siempre será una gran verdad que un ferrocarril realiza una labor fraternal más intensa que un tratado diplomático.

Que venga, pues, el capital americano a fomentar esas empresas; a darles vida y aliento, a convertir en realidad el bello pensamiento del ferrocarril panamericano.

Pudiera dar sobre este tópico datos estadísticos; pero en esa materia me remito a las consideraciones hechas por mi compatriota el Doctor Pedro S. Fonseca, Director de Estadística de El Salvador, cuyos trabajos acompaño y recomiendo a la consideración del Congreso.

La vía de Tehuantepec ha ofrecido grandes facilidades al comercio centroamericano, especialmente a El Salvador. El café era conducido por esa vía con destino a los puertos de Europa. Normalizado México, esa ruta continuará siendo la preferida por importadores y exportadores, haciéndole competencia al Canal de Panamá, si nuevas arterias de vida no se abren a la labor económica de etos países.

Una bella esperanza, en ese sentido, es la acariciada por los centroamericanos con la apertura, en un futuro próximo, del canal interocéanico por la vía de Nicaragua.

CARRETERAS PÚBLICAS.

Centro América ha comprendido desde tiempo ha la necesidad imperiosa de mantener buenos caminos interiores que completen la obra de las empresas de navegación, porque ilusoria sería una cosa sin la otra. Así lo han estimado los Gobiernos centroamericanos, los cuales destinan fuertes sumas en sus Presupuestos anuales para la apertura y conservación de caminos públicos.

Digna de especial mención es la hermosa carretera que partiendo del puerto de Amapala, en la República de Honduras, conduce a Tegucigalpa.

El Salvador cuenta también con importantes vías de comunicación interna. Al puerto de La Libertad y a muchos Departamentos pueden transportarse pasajeros y mercaderías en camiones y automóviles.

Pero también en ese orden de ideas el capital americano tiene ancho campo donde ejercitar su saludable influencia. *Nuestros pueblos no piden a las empresas extranjeras sino justicia, honradez y competencia.*

COMERCIO Y AGRICULTURA.

Los países centroamericanos son esencialmente agrícolas; siendo el café su más valiosa producción. Lástima sí que ella no sea debidamente apreciada en los mercados norte-americanos. De ahí que ese precioso producto, inmejorable por sus condiciones, se dirija en su mayor parte a Hamburgo, Havre, Londres, Amberes, etc., etc.; pues allá obtiene alto precio y mejor demanda que en Estados Unidos.

Las industrias están aun en período de gestación, no por falta de iniciativa partiótica ni de especiales cualidades, sino por falta de capital disponible. El existente, apenas llena las necesidades del giro ordinario de los negocios y de la agricultura.

Sin embargo, es Estados Unidos el país que en mayor escala provee de maquinarias necesarias para el adelanto de nuestras industrias. Ojalá también llegara el capital indispensable para darles impulso bienhechor. Él será recibido con los brazos abiertos, si, como es de esperarse, procura amoldarse a las exigencias nacionales y no se muestra absorbente ni exclusivista.

Que el comercio americano dilate la esfera del crédito; que no abrume al industrial o comerciante centroamericano con las zozobras que trae consigo el corto plazo y el crecido interés.

Y la válvula de seguridad para el exportador estaría en las referencias que suministrarían las instituciones de crédito de Centro América, que inspiran, por su seriedad e independencia, todo respeto.

IMPUESTOS.

Constituyen éstos una pesada carga para el importador que en último extremo soporta el pueblo consumidor.

Últimamente nótase una noble tendencia a operar una evolución benéfica: cambiar el sistema de impuestos indirectos por la forma de tributación directa, calculada sobre el capital o la renta.

Ese es un gran ideal socialista que tiende al reparto justiciero de las cargas públicas. El Salvador, Guatemala, Costa Rica y Nicaragua tienen ya mucho avanzado por ese hermoso camino. Ojalá sí que al fijar la tasa sobre la renta

se procurara libertar de impuestos a aquellos productos que, como el café, están suficientemente gravados. Porque no sería justo que pagaran impuestos como productos amén del que les corresponderían como elementos determinantes de una renta.

CRÉDITOS Y BANCOS.

Si se realiza el bello ideal del ingreso de capitales extranjeros para robustecer las instituciones bancarias ya existentes o para crear otras nuevas, bajo la base de emisión de acciones, bueno es pensar en la conveniencia de que el capital nacional mantenga el legítimo control en los negocios para no provocar injustas suspicacias. De esa labor armónica vendrían incalculables beneficios.

El implantamiento radical del Talón de Oro no es aconsejado por la prudencia. La sacudida sería muy brusca; y si bien el comercio resultaría beneficiado, la agricultura sufriría certero golpe. Quizás convenga mejor ensayar la fórmula concreta del sabio estadista mexicano señor Limantour, quien señaló al peso nacional el valor de 50 centavos oro, garantizando la equivalencia con suficiente depósito del metal amarillo. Los resultados halagüeños que se experimentaron recomiendan la bondad de la idea. La estabilidad en los cambios sería la mejor conquista, ya se trate de países con sistema de oro, plata o bimetalista.

DEUDAS.

La unificación de todas las deudas que gravitan sobre los Estados del Istmo, daría espléndidos resultados, si a ese desiderátum se llegara después de un maduro estudio de las circunstancias económicas de cada país. La responsabilidad de los Gobiernos y la estabilidad de las instituciones públicas harán huír de ese sistema de gravámenes aduanales, que tanto debilitan el crédito nacional.

TRATADOS.

Aventuro el pensamiento de que los países centroamericanos verían con agrado la celebración de Tratados Comerciales, en los cuales se estipulasen algunos privilegios a Estados Unidos a cambio de ver convertidas en realidad algunas de las tendencias expuestas en los puntos anteriores.

Y si a esto se agregara la unificación de tarifas de aduana, sobre la base democrática de una prudente rebaja en beneficio del pueblo, el resultado sería de gran transcendencia moral, política y económica.

Propongo el nombramiento de una Comisión integrada por elementos americanos y centroamericanos para el desarrollo y estudio de los temas esbozados. Sólo así podrá llegarse a la más satisfactoria solución.

Pudiera invocar datos de importancia relacionados con estas materias; pero quiero mantenerme dentro de la disciplina del Programa que concede un limitado espacio de tiempo para la lectura de este Resumen. Quiero sí consignar que no siento doctrinas nuevas, sino algo que todo hombre práctico en la vida comercial conoce y anhela.

Ofrezco ampliar verbalmente mis ideas en el curso de las conferencias que celebren las Comisiones respectivas, cuando se trate de convertir en hechos las atrayentes aspiraciones de este Congreso.

The Chairman. We are very much indebted to Secretary Guirola for his interesting paper and we shall be glad to give him and others an opportunity to discuss the matter a little later. I think the best plan would be to have all of the papers read now, and then at the

close (there are only two or three additional papers) we will have a general discussion of all the topics. We are fortunate in having with us Mr. Obregon, who has a paper to read, and I think the best plan will be to have the papers of Messrs. Obregon and Kemmerer read, and then, after the final paper by Prof. Adams, we can come back to a discussion of the general topic, in which Mr. Casasus, Mr. Gonzales, and others will take part.

I now have the pleasure of introducing Señor Lic. Toribio Esquivel Obregon, ex-secretary of the treasury of Mexico, who will read a paper on "The necessity of adopting uniform principles in banking in the American countries as a means of approximation to uniform monetary systems." I will say to Mr. Obregon that if he would prefer to speak rather than to read his paper, we would be glad to give him that privilege.

NECESIDAD DE ADOPTAR PRINCIPIOS GENERALES UNIFORMES EN LA AMÉRICA EN MATERIA DE BANCOS, COMO MEDIDA PARA APROXIMARSE A LA UNIFICACIÓN MONETARIA.

Por TORIBIO ESQUIVEL OBREGÓN,
Ex-Ministro de Hacienda de México.

Nada puede expresar más elocuentemente la protesta de la humanidad y de la civilización contra la guerra que devasta la Europa que esta reunión, que aun cuando no tiene por objeto ocuparse en nada de lo que afecta en especial al viejo continente, es producto espontáneo de un sentimiento de previsión y de horror creado por el espectáculo de una de las calamidades más terribles que jamás ha conmovido al mundo. Por un efecto necesario de la ley de polarización, tan aplicable en el orden social como en el orden físico, la fuerza que del otro lado del Atlántico hace a los hombres que se separen y se maten, aquí los hace buscar la amistosa inteligencia y la unión que asegure para siempre la paz, que haga imposibles en América los destrozos y las lágrimas que engendra la guerra.

Si del seno de este Congreso surge algo, aun cuando sea a primera vista inapreciable, que una a los hombres con más estrechos vínculos que los que antes había, será muy grande la satisfacción que disfrutemos todos los que aquí nos hemos congregado.

Yo tengo particular esperanza en los trabajos de esta Sección del Congreso, porque ella tiene a su cargo el estudio de lo que más liga a los hombres: los intereses.

La historia de la moralidad humana puede dividirse en dos grandes períodos: uno anterior y otro posterior a Adam Smith. No me refiero a la moral ideal, sino a la moralidad practicada entre hombres y pueblos. Si Cristo formuló los principios más puros desde el punto de vista ideal, Adam Smith nos ha dicho: "no es por abnegación y sacrificio, sino para vuestra más práctica utilidad que el mártir del Calvario os mandó que os amarais los unos a los otros."

Desde entonces las más altas inteligencias se dedican a buscar y siempre encuentran la fórmula de la prosperidad en la conciliación de los intereses a primera vista más contradictorios. Por desgracia los pueblos no siempre escuchan las voces de la sabiduría, y lo que hay aún en el fondo más obscuro

de la naturaleza humana del hombre de las cavernas hace que las pasiones salvajes se desborden por encima de los diques creados por los apóstoles del progreso económico y moral.

Hace aún pocos meses tuvo lugar en esta misma ciudad una reunión de financieros, que desde el punto de vista económico, pudiéramos considerar como precursora del presente Congreso. Del seno de esa Junta salió la idea de la unidad monetaria americana esbozada en términos demasiados generales e imprecisos, al menos en la información que yo he tenido.

Pero esa idea es digna de ser tomada en consideración aquí por la trascendencia que puede tener, aun cuando no se considere como imediatamente practicable ni se aspire a obtener el cambio internacional americano a la paridad absoluta. La unidad monetaria no es una cosa que puede decretar directamente ningún legislador: es un hecho que procede de las múltiples manifestaciones de la vida de un pueblo que pueden afectar su vida económica. Todas las cuestiones que se relacionan con la moneda son de una delicadeza extrema, porque cualquier cambio en ella puede trastornar profundamente a las clases sociales y traer consigo cambios en la política, en las costumbres y hasta en los sentimientos religiosos.

La moneda no es más que la medida de los valores; pero por eso mismo es ella la fórmula de la justicia en los contratos. El acreedor debe recibir un poder adquisitivo igual al estipulado. Si en el momento de cumplirse con el contrato, el deudor cumple con la estipulación verbal y entrega una suma de monedas convenida, pero estas monedas no tienen el valor adquisitivo que se tuvo en cuenta, la moneda, igual en denominación, encubre una desigualdad y una injusticia en el fondo.

Si la moneda expresa de un modo seguro la justicia en las relaciones individuales, ella también expresa la justicia en las relaciones de los pueblos, y aproximarse en cuanto sea posible a la unidad monetaria, no es solamente realizar un progreso en el orden económico, sino que, como todo lo que es profundo en ese orden, es realizar un progreso moral, porque se tendrá un perpetuo monitor de la justicia en las relaciones del cambio internacional.

Cuando un país manda a otros más de lo que de ellos recibe y, sin embargo, el cambio sobre el exterior está caro como consecuencia de que es más lo que tiene que pagar a sus acreedores extranjeros y que hay más demanda que oferta de giros, puede asegurarse que existe allí una grave injusticia y que al mismo tiempo alguna ley económica se ha violado.

Cuando un país recibe de otro más de lo que le manda y compra baratos los giros sobre éste porque abundan en él sus deudores, puede decirse que las relaciones mercantiles no se basan en un principio de justicia y que algún obstáculo impide el buen funcionamiento de las leyes económicas, a no ser que el costo de la vida en el interior del país excedente en exportación haya bajado de un modo notable.

La fórmula más exacta de la justicia en el comercio entre dos países, se encuentra en la paridad del cambio; entendiendo por tal no la paridad absolutamente invariable, sino con una fluctuación que no exceda del llamado "gold point".

Hasta ahora ha sido frecuente que el valor de las exportaciones en los pueblos de la América Latina exceda al de las importaciones y sin embargo el cambio sobre los países a donde esa exportación se dirige es caro, a veces demasiado caro, y el único camino para sostener la paridad es por medio de empréstitos del gobierno, o por la venta al extranjero de las más productivas y seguras empresas.

La responsabilidad de tal estado de cosas no corresponde de ninguna manera al capital europeo; al contrario, si este ha podido dominar en los mercados de

los países del sur se debe a que, lejos de adoptar para el crédito la forma estricta de descuento mercantil para obtener pronto su ganancia y no correr los riesgos de una inversión prolongada e incierta, ha hecho operaciones de larguísimo plazo y de gradual amortización para fomentar la agricultura y la industria. De aquí se derivan los vínculos inquebrantables que ligan a los países al sur del Río Bravo con los bancos y los hombres de negocios de Europa.

La culpa no es del capital europeo, pues no existe en el mundo el capitalista que no aproveche las oportunidades de una lucrativa inversión.

Toda la responsabilidad de ese mal debe buscarse en los fenómenos internos de la vida de los pueblos latino-americanos, fenómenos derivados en su mayoría del gran problema de la raza indígena que se encuentra en el fondo de toda manifestación social latino-americana. Limitándome a una de las manifestaciones de ese mal que oprime a nuestros países, puedo decir que en mucho se debe a errores económicos que han retardado nuestro desarrollo. Si se escribiera la historia de la América Latina desde el punto de vista económico se sacaría de ella una gran luz respecto a la verdadera causa de sus agitaciones. La historia dejaría de ser un tribunal airado que imparte condenas, eterniza disputas y enardece los rencores, para ser realmente la augusta *magistra vitae* que concebía el célebre orador romano y presentaría a la luz del mundo las verdaderas fuerzas que gobiernan a las sociedades.

Para el financiero sobre todo sería fecundísima en enseñanzas y para el financiero anglo-americano en especial que trata en estos momentos de entrar en competencia en aquellos países con el capitalista europeo, esa historia tendría revelaciones muy útiles. Saber, por ejemplo, a qué causa se debe que mientras en la Argentina existió el banco de la Provincia de Buenos Aires desde 1803, en México todos los esfuerzos del gobierno fueron inútiles para lograr el establecimiento de un banco hasta la segunda mitad del Siglo XIX; saber por qué el anglo-americano, que es tan afecto en los Estados Unidos a la agricultura y prospera tanto en ella, nunca o casi nunca emprende negocios agrícolas en México donde un suelo rico y un clima más benigno parecen invitarlo a ello; explicarse esos fenómenos y otros análogos sería ir al fondo mismo de nuestra historia y revelar el mecanismo de nuestras fuerzas.

La ignorancia de la economía política entre las clases gobernantes de algunos de los pueblos de nuestro continente las ha hecho inconscientes de sus errores y de las graves consecuencias que han tenido para la vida de la nación. Esa ignorancia es excusable por muchas razones, pero ha existido y sigue existiendo y causando estragos. Los Estados Unidos al nacer a la vida independiente tenían por suerte a un Hamilton, que, sobre la base del interés común, fundaba la unidad nacional, y dió a su patria una orientación segura que la experiencia de más de un siglo ha confirmado. Él vió la fuerza de su país en la unión de los intereses y su pensamiento, atacado muchas veces por los políticos, ha triunfado al fín en la ley que, creando los bancos federales de reserva, ha dado a este país la unidad bancaria de que antes carecía y que le permite ahora entrar en la lucha con los países del viejo mundo.

Mientras el medio social permitía que en los Estados Unidos Hamilton esbozara su pensamiento, en la América Latina aún no se conocía el comercio internacional; y si en Norte América los prejuicios sembrados por políticos ignorantes estorbaron el desarrollo de la idea económica durante un siglo, en los países de la América Latina la lucha contra los prejuicios es mil veces más árdua.

Si se quiere formar una idea de los gravísimos errores económicos cometidos en aquellos pueblos y de los profundos trastornos sociales producidos por esa causa, bastará arrojar una mirada sobre le situación de los cambios exteriores,

y se verá que en tanto que en algunas de las repúblicas de este continente el cambio sobre los Estados Unidos está a la paridad legal, o cerca de ella, en otras, y son las más, el cambio, como consecuencia de la depreciación de la moneda, llega a tal extremo que se necesita 20, 32 y hasta 102 pesos de la moneda legal para comprar un dólar.

Se comprende con facilidad cuán profundamente se hallará sacudida la vida económica de esos países, en donde no es posible que los salarios, y las rentas de los capitales fijos y moviliarios sigan paso a paso las fluctuaciones del cambio. En la incertidumbre y el azar de los negocios, se arruinan hoy los que ayer eran acaudalados, en todas partes crece el apetito del azar más que la confianza en el trabajo perseverante y el comercio que no puede ser sobre mercancías que alcanzan precios fabulosos, se hace sobre valores que la fiebre de especulación busca o rechaza según el efecto psicológico producido por los diarios acontecimientos.

Ante la realidad de esa situación en los cambios, ¿qué importancia puede tener en la economía de una nación o del mundo entero, que se adopte teóricamente una unidad monetaria, si esa unidad no ha de servir para encontrar la fórmula de justicia entre las prestaciones, si acreedores y deudores se han de ver sin cesar amenazados por cambios adversos o han de abrigar ilegítimas esperanzas a costa de la ruina o del perjuicio ajenos?

El comercio mundial no gana nada con un estado así. El mejor negocio que se hace en los países trastornados en sus sistemas monetarios no es emprender el fomento de la agricultura o de la producción en sus diversas formas, sino comprar barato para vender caro, o comprar aun cuando sea caro para vender más caro aún, hasta que llega el desastre final; la bancarrota. El mundo entero tiene interés en que cambie ese estado de cosas. ¿Cómo lograrlo? Señalando los errores cometidos y procediendo a enmendarlos.

Debo limitarme aquí a señalar las causas principales del mal, ante todo aquellas que atañen directamente al objeto de este trabajo.

Las naciones de Europa tuvieron una larga experiencia desde la antigüedad y en la Edad Media hasta la época actual, de esa experiencia surgió la ciencia económica, que permite a los pueblos nuevos recorrer en poco tiempo el laborioso ciclo de adaptación que aquellos pueblos siguieron. Los Estados Unidos, por ejemplo recorrieron ese ciclo en poco más de cien años, pasando por todas las vicisitudes hasta llegar al modernísimo "currency bill" de 1914 que por primera vez les permitirá desplegar toda su inmensa energía económica. Antes del "currency bill" la situación de los Estados Unidos era anómala, poseyendo dos quintas partes del poder bancario del mundo entero eran un país económicamente débil; teniendo en sus bancos Dls. 1,500,000,000, necesitaban implorar el auxilio de Inglaterra, cuyo banco tenía una existencia de 150,000,000 de libras esterlinas. ¿Por qué era ésto? Porque los prejuicios económicos habían impedido la unidad bancaria. ¿Cómo se ha remediado el mal? Por un procedimiento muy sencillo, uniendo lo que estaba desunido, siguiendo la misma dirección del movimiento que desde un principio ha contribuido a labrar la grandeza de este país, poniendo en práctica la enseñanza que cada dolorosa experiencia le deja, dirección y enseñanza que desde un principio ha simbolizado en este hermoso lema de confraternidad: "E Pluribus Unum."

Muchos de los países de la América Latina no han aprovechado hasta ahora las enseñanzas de la ciencia económica para abreviarse el ciclo de su dolorosa carrera y ahorrarse los golpes de la propia experiencia. Por eso, a pesar de poseer abundantísimas riquezas que otros pueblos codician, viven solicitando la ayuda del capital extranjero y dan al mundo en ocasiones un

espectáculo semejante al hombre que, cubierto de harapos, muerto de hambre y de frío, pisara sin saberlo la roca que oculta las prodigiosas riquezas del cuento oriental.

La idea que tanto asedió a los espíritus durante la Edad Media de encontrar una piedra, una substancia, a cuyo contacto los otros metales se convirtieran en oro, idea que si se hubiera realizado no habría producido riqueza ninguna, sino habría acabado con el valor monetario del oro, esa idea, repito, al ser desterrada de la química por las conquistas de Lavoisier, no fué desterrada de los cerebros; siguió aferrada allí y encontró una fórmula deslumbrante en la teoría del celebre Law, que pretendía que cualquiera clase de valores existentes podría servir de base para crear y sostener en el mercado especies circulantes que hicieran las veces de moneda. Sabidos son los estragos que esa doctrina causó, preduciendo, en cambio, la ventaja de curar en Europa a los espíritus del peligroso error.

En la América Latina, sin embargo, aun suele encontrarse alguno que otro albergue de las ideas alquimistas y de las creencias de que se enriquece al país aumentando las especies circulantes, sin apoyarlas a veces sino en riquezas no explotadas aún, en esperanzas para el porvenir en que las futuras generaciones vengan a pagar las deudas que nosotros contraemos; y para ello, a la idea alquimista del Siglo XII se unen en peligrosa combinación las modernas ideas del crédito y de los documentos negociables.

El mal procede de dos fuentes: unas veces es la urgencia del gobierno de satisfacer necesidades más o menos reales que lo obliga a lanzar a la circulación el papel moneda por no atreverse a exigir en forma de franca contribución nacional los subsidios que el servicio público requiere, y luego ni siquiera se limita la emisión a la necesidad real, sino que, ante la facilidad del procedimiento y ante lo intangible del mal, se recorre pronto una escala descendente que lleva al abismo. Se quiere subsanar la pobreza real aumentándose proporcionalmente la especie circulante, pero como los capitales no se aumentan, sólo los precios suben sin subir en proporción los salarios, y a medida que la miseria es mayor, mayor es la necesidad de aumentar la emisión, y mientras más se aumenta ésta, más suben los precios y la miseria, de suerte que el país no halla luego cómo salir de aquel círculo de hierro. Entonces un mal que debería ser transitorio y que afectaría directa y proporcionalmente a las clases capitalistas, se hace un mal de duración indefinida y que va a atacar la economía de las clases trabajadoras, transtornando todas las relaciones de negocios.

Otras veces no ha sido la necesidad del gobierno, sino el deseo de acelerar el progreso, quizá de encauzar las fuerzas económicas del país, haciéndolas cooperar para el pronto desarrollo de la riqueza pública, pero deseo que, por desgracia, no ha sido siempre secundado por un conocimiento exacto de los fenómenos sociales ni ha obedecido en ocasiones a los preceptos de la ciencia económica.

Permitidme, para ser más correcto en mis apreciaciones, que me refiera en especial a México, por ser de este país del que puedo tener algunas ideas más concretas.

La ley bancaria de primero de marzo de 1897, concedió en apariencia libertad para el establecimiento de bancos de emisión en toda la república; en realidad creó monopolios locales de emisión debido a las franquicias otorgadas a las empresas que obtenían la primera concesión en cada Estado, y debido también a las condiciones del país. Ese monopolio era compartido por el Banco Nacional y el de Londres y México.

El Artículo 16 de la ley establece que: "La emisión de billetes no podrá exceder del triple del capital social efectivamente pagado, ni tampoco podrá,

unida a los depósitos reembolsables a la vista o a un plazo no mayor de tres días, exceder del doble de la existencia en caja en dinero efectivo, o en barras de oro o de plata. No se cuentan entre los depósitos los hechos en cuenta corriente y con intereses recíprocos o diferenciales, aun cuando tengan el derecho los depositantes de girar por cheques."

Gracias a esta ley en poco tiempo cada uno de los Estados de la República tuvo un banco de emisión. Vamos a ver los resultados, que pueden ser una fructuosísima enseñanza.

En 1896, un año antes de la ley bancaria, los billetes de banco en circulación en la República, sumaban treinta y ocho millones de pesos; trece años después de que la ley se puso en vigor, en 31 de diciembre de 1910, sumaban 114,000,000 de pesos. Casi se había cuadruplicado la circulación.

Todavía más, en 1903, se formó un censo monetario en la república y tomándose en cuenta las existencias en metálico en los bancos, se obtuvo un total de circulación de moneda real de 61,000,000 de pesos. Siete años después solo la existencia de esa moneda en la caja de los bancos era de 88,000,000.

En diez años contados desde 1898 hasta 1907 las importaciones habían subido de 46,000,000 a 147,000,000 y las exportaciones de 137,000,000 a 258,000,000 de pesos.

¿Qué cuadro podrá darse que fuera más demostrativo de la prosperidad de un país?

Sin embargo, durante ese período había sido necesario reconocer legalmente la imposibilidad de sostener el valor de nuestra moneda nacional de plata, debido a dos factores que obraron a la vez: la depreciación de ese metal, que no podía haber evitado ningún gobierno, y la libre acuñación de monedas de plata que podía y debía de haberse suprimido.

Pero dejando este asunto que nos llevaría muy lejos y no atañe de modo directo a mi propósito, voy a hacer referencia a otro fenómeno.

Por los años de 1576 a 1600 el jornalero francés ganaba un salario y el trigo tenía tal valor que, si aquel hubiera invertido toda su ganancia de un año en comprar ese cereal, adquiriría nueve hectólitros; en tanto que el jornalero francés antes de la guerra actual podía adquirir con su jornal de un año treinta y siete hectólitros y medio de trigo. Tal es el efecto de un sólido progreso.

En México, teniendo en cuenta los jornales y los precios de las mercancías de primera necesidad, resulta que el jornalero de la época virreinal, en 1792, podía comprar con lo que ganaba en el año 35¾ hectólitros de maíz; en 1891, algún tiempo antes de la ley monetaria y bancaria 42½ hectólitros y en 1908, cuando ambas leyes estaban ya en vigor, solamente podía comprar 23½ hectólitros. En 1792 podía comprar 23 medidas de a cien kilos de harina, en 1891 podía comprar solo 9¾ y en 1908 ya solamente 5¼. Ante esta situación el trabajador mexicano, venciendo su natural resistencia por los viajes, comenzó a emigrar para los Estados Unidos en busca de lo necesario para la vida.

Podrá creerse que tal situación redundaba en beneficio de los proprietarios agrícolas; pero tampoco era así. El crédito territorial había subido de 5% en la época colonial y primera mitad del siglo XIX a 9, 10 y aun 12%. Además, en la época colonial como en mil novecientos diez era una proposición generalmente verdadera que el agricultor que contraía una deuda con la esperanza de pagarla con los productos de la tierra, excepcionalmente lo lograba y que su única esperanza de libertad consistía en la venta de su finca a persona que viniese con un nuevo capital a refaccionar el negocio.

Por otra parte el excedente de las exportaciones sobre las importaciones en los diez años arriba mencionados era de 811,000,000 de pesos. ¿Ese excedente, se

nos estaba debiendo en el extranjero? De ningún modo; si así hubiera sido el cambio habría tenido premio para México y habría bastado suprimir la libre acuñación de la moneda de plata para hacerla recuperar su valor. Era un hecho evidente que nosotros debíamos al extranjero y que nuestros cambios no alcanzaban la paridad sino cuando la plata subía de valor, pues nuestra moneda no tenía título ninguno como tal, o cuando el gobierno o alguna empresa privada contrataba un empréstito que le permitía vender giros a la Comisión de Cambios y Moneda, para conservar su fondo regulador, o al público en general.

Pero el excedente de 811,000,000 de pesos en el valor de nuestras exportaciones sobre nuestras importaciones, y el hecho de quedar aún nosotros a deber al extranjero no es todo lo que puede dar idea del profundo mal económico, pues debe advertirse, además, que los empréstitos cuantiosos contratados por el gobierno, por los bancos, por las empresas particulares en el extranjero, no llevaron dinero casi nunca a México: el dinero se quedaba en los otros países y el gobierno, los bancos o los particulares lo que hacían era vender los giros al comercio; y como el importe de esos giros no figura en el cuadro de las exportaciones, habrá que tenerlo en cuenta para calcular lo que México perdía anualmente, y para explicarnos por qué todas las empresas más productivas, bancarias, industriales, mineras o comerciales, habían pasado gradualmente a ser propiedad de extranjeros. Teníamos que pagar al extranjero no solo el valor de nuestras importaciones sino las rentas y el rédito y amortizaciones de los capitales que le debíamos y los dividendos de las empresas que habían pasado a sus manos y que de año a año eran mayores.

¿Cuál era la causa de este desastre?

Debo limitarme a estudiar una de ellas; un grave error cometido en el sistema bancario, que contiene una lección para los pueblos que se encuentran en caso análogo al de México e indica la necesidad de adoptar principios científicos en punto a moneda y a instituciones de crédito.

Un banco no debe ser mas que un corredor de dinero, con capital propio que sirve de base para atraer la confianza del público y cuya función es la de una garantía subsidiaria para ese público; garantía subsidiaria, puesto que la directa está en las obligaciones contraídas por el deudor del banco en cada operación. La práctica demostró que podían los bancos contraer obligaciones de pago a la vista con la seguridad de que, en casos normales, no se presentarían todas a la vez al cobro y que la confianza de los depositantes y del público que recibía las obligaciones como moneda circulante, permitía al banco atraer el dinero de la masa de la población por medio de los billetes y multiplicar sus operaciones.

La confianza del público, más que disposiciones legislativas, hace que el billete circule como moneda real, aun cuando no sea lo que propiamente se llama papel moneda, por carecer de facultad liberativa, conforme a la ley, pues de hecho suele tenerla en la práctica, como la tuvo siempre en México, en virtud de la confianza ilimitada del público en los bancos, y del cuidado que puso el gobierno en que se conservara ese prestigio. Mas el problema de la emisión de billetes tiene dos aspectos; uno desde el punto de vista de la seguridad del crédito del banco; el otro consiste en saber si conviene al público que los bancos, saliéndose de sus funciones propias de corredores de dinero, se conviertan en creadores de una moneda que entra en competencia con la real.

La cuestión desde este segundo punto de vista no afecta al principio de libertad bancaria; pueden establecerse cuantos bancos se quiera para emprender el negocio de recibir depósitos y prestar el dinero de los que lo ahorran a los que lo necesitan, con una utilidad en la diferencia de intereses, pueden

hacer operaciones de descuento y de cambio y todas las conexas; pero no participar en la función que todas las naciones consideran como un derecho y un deber del Estado: emitir moneda. Fácilmente se comprende que delicado es esto si se tiene en consideración que la moneda de los bancos carece de todo valor intrínseco, por la substancia misma de que está hecha.

Todo lo que es indispensable para un país poseer la cantidad de moneda necesaria para su circulación, le es altamente perjudicial tener más de la que esa circulación requiere, y más pernicioso aún que se carezca de toda proporción entre la existencia monetaria y la circulación.

El título de la moneda, es decir, la causa de que el público le dé un valor determinado en las transacciones, no depende del valor de su metal, sino de la proporción en que la cantidad de moneda circulante se encuentra con las necesidades de le circulación. El gran economista Molien, Consejero de Napoleón I, decía "La primera condición de toda moneda es tomar de su empleo la medida de su emisión, y esta condición es mucho más indispensablemente obligatoria para la moneda artificial que un banco puede emitir, que para la moneda real. Cuando hay superabundancia de moneda real la superflua toma fácilmente otra forma; cuando hay superabundancia de moneda artificial, la superflua envilece toda la masa y degrada su título."

Tal fué exactamente lo que pasó en México: Mientras más infundía confianza el billete de banco más competía con la moneda real. El capital social no había aumentado, la producción agrícola y manufacturera no creció en proporción del aumento de moneda. Por una obvia aplicación de la conocida ley de Gresham, la moneda de papel, sin ningún valor en el exterior, arrojaba fuera del país a la moneda real; el Gobierno, primero de un modo oculto y después abiertamente, hubo de confesar la imposibilidad de cumplir con el propósito de no acuñar más moneda de plata, pues sin cesar tenía que cubrirse el desfalco en el stock monetario. Mientras más salía la moneda, más se aumentaba la acuñación, y en esta carrera desenfrenada, se llegó a la existencia de especies circulantes que antes hemos dicho, que mirada de fuera parecía la prosperidad y que observada por dentro, era la miseria que avanzaba preparando el campo para tremendos cataclismos.

Como consecuencia de la depreciación de la moneda, todos los valores subían. Las propiedades que ayer valían diez mil pesos, hoy se vendían en treinta o cuarenta mil, y mañana alcanzarían doble precio. Pocos pensaban en comprar una finca de campo para cultivarla; la mayor parte la compraba para la especulación, y así sucedía en todo.

Los salarios mientras tanto no subían, ni remotamente, en proporción, porque el trabajo productivo no se intensificaba en realidad, desde el momento en que se vivía en pleno delirio de especulación con valores, y además como consecuencia del aumento de población debido a la paz, que arrojaba mayor número de brazos en competencia. El costo de la vida subió para el jornalero hasta los límites de la miseria.

El Gobierno no se reservó ninguna dirección sobre la emisión, pues hemos visto que esta era dejada al arbitrio de los bancos, con la única condición de no pasar del triple de su capital, o de que, unida a los depósitos reales, reembolsables a la vista, no excediera del doble de la existencia en caja en dinero efectivo o en barras de plata u oro.

En esa disposición de la ley bancaria de 19 de marzo de 1897 está encerrada una buena parte del secreto de la miseria real de nuestro pueblo; porque mediante esa disposición era imposible para el Gobierno hacer que la moneda real sacara su título de la justa y exacta proporción entre la cantidad de moneda circulante y las necesidades de una sana circulación que no produjera la depreciación de las especies monetarias.

Una fácil aplicación de las doctrinas de Molien habría bastado para comprender el mal y evitarlo.

Sir Robert Peel en el discurso que pronunció en el Parlamento en apoyo de la ley que modificó el funcionamiento del banco de Inglaterra en 1844 expresó los siguientes conceptos. "Propongo, en consecuencia a la Cámara que decida que el Banco de Inglaterra continuará gozando de sus privilegios actuales; pero a condición de que se divida en dos establecimientos: uno encargado exclusivamente de emitir billetes; y el otro limitado a las operaciones de banca ordinarias.

" Creemos que son dos órdenes de hechos distintos. Pensamos que el privilegio de emitir billetes debe estar sometido a la dirección del Estado, y que, por el contrario, la mayor independencia debe reinar en las operaciones de banco.

" Limitamos así tanto como es posible, este mal inherente a la circulación del papel: la concurrencia ilimitada. Como lo he dicho, nuestro intento es introducir esta modificación en nuestro sistema actual de banca, de modo de lastimar lo menos posible los intereses particulares. Por esto no propongo desde ahora privar de sus privilegios a los bancos locales de emisión. No queremos evitar las vivas y profundas alarmas que no dejarían de provocar una brusca e inmediata interrupción de toda emisión distinta de la del banco de Inglaterra. Los bancos de emisión conservarán sus privilegios, a condición de que el monto de sus billetes en circulación no pase de una medida calculada sobre cierto período. Esta precaución es necesaria para que el banco de Inglaterra sepa siempre con exactitud la cifra de la circulación local que haga concurrencia a la suya y limitar sus emisiones en consecuencia."

Notemos de paso esta disposición del célebre ministro inglés que indica las cualidades de un estadista de verdad: a pesar de su profunda convicción de que la emisión debía limitarse al Banco de Inglaterra, no quiso tomar una medida brusca que alarmara al público y lastimara los intereses creados. Se limitó a someter a una regla la emisión de los billetes para evitar la competencia de ellos con la moneda real, y a aconsejar que, a medida que las concesiones de los bancos expiraran, no volvieran a renovarse con la facultad de emitir billetes.

Vemos, pues, cuales son las ideas científicas que han ayudado a la prosperidad inglesa y que tienen que ser observadas en todas partes so pena de tremendos fracasos; libertad completa para el establecimiento de bancos para difundir por todas partes los beneficios del crédito, y absoluto control de la emisión de billetes por el Gobierno por medio de una fuerte institución de crédito. No solamente, sino que la base positiva de la emisión, rigurosamente seguida por el Gobierno americano es que el billete para no entrar en competencia con la moneda, debe ser siempre el signo del depósito real del dinero, de manera que un billete de banco de a un dólar representa un dólar real y positivamente existente en depósito. Pero como la existencia de moneda real está rígidamente limitada, la nueva ley permite hacer frente a las demandas excepcionales de dinero durante la estación de las labores agrícolas, por medio de una emisión que hace el Gobierno, emisión que se retira automáticamente, por un sistema sabiamente elaborado de disposición de las reservas bancarias, y que permite, sin riesgo alguno, que en los casos de crisis los bancos aumenten sus operaciones en lugar de disminuirlas.

En el sistema de la legislación bancaria mexicana todos estos principios están violados; la libertad bancaria no existe, pues quedó de hecho formado un monopolio en cada Estado; en cambio el Gobierno no tenía dirección ninguna respecto a la emisión, sino que los bancos podían a su arbitrio extenderla o limitarla dentro de un margen amplísimo formado por la ley sin relación con las reales necesidades de la circulación y como ese margen permitía una emisión

mucho mayor que el capital de banco, resultaban naturalmente la competencia del billete con la moneda real y la corrupción de toda la masa circulante. El único aspecto del fenómeno bancario que parecía preocupar al Gobierno era la seguridad de los bancos para sostener en su favor la confianza del público, y este fin se logró admirablemente; el público tenía confianza en los billetes de banco, con fe que casi podríamos decir supersticiosa. Esta preocupación del Gobierno por la estabilidad de los bancos, que llevada al exceso creó en muchos casos la improvidencia y la especulación de los banqueros con la seguridad de que el Gobierno los había de ayudar, produjo a veces consecuencias fatales para el público, quitando a la emisión de billetes la única ventaja que podía haber tenido, la de prestarse con la debida flexibilidad a atenuar los efectos de una crisis, pues cuando los temores de ésta aparecían, el Gobierno obligaba a los bancos a reducir sus operaciones y de este modo los bancos perjudicaban los intereses generales en tiempos normales por el abuso de la emisión y la competencia del billete con la moneda real, y los perjudicaban en tiempo de crisis reduciendo sus operaciones. Pero en unas y en otras ocasiones los dividendos eran seguros.

El caso típico de esta situación se presentó durante la crisis de 1907 en que el Gobierno ordenó a los bancos que se limitaran a las operaciones de descuento real para ponerse a cubierto de alguna emergencia, lo cual equivalía a suprimir el crédito en la forma en que, bien o mal, lo habían servido hasta entonces aquellas instituciones. Era una medida brusca que no habría aconsejado Sir Robert Peel, ni menos tomada en tiempo de crisis.

Aquello vino a revelar el verdadero estado del país y a despertarnos de la fiebre de especulación.

Mientras tanto la depreciación de nuestra moneda había permitido que nuestros valores y nuestras empresas pasaran a manos extranjeras, y los mejores productos de las minas, de las industrias y del comercio no eran para México, se exportaban, no para pagar nuestras importaciones solamente, sino en gran parte como beneficio de capitales extranjeros.

México recordaba así la célebre expresión del poeta mantuano *sic vos non vobis.*

Aprovechando la experiencia de ese país, y poniendo en práctica los principios científicos nos aproximaremos más, no digo a la adopción teórica de un talón monetario que sólo sirva para facilitar operaciones aritméticas y de ningún modo para beneficiar al pueblo; sino a hacer de la moneda lo que ella debe ser: una base sólida para apreciar la justicia en el continuo cambio de prestaciones, ya sea del comercio interior o del exterior.

Preparado así el camino por la acción bancaria, se puede alguna vez llegar a la unidad de la moneda, sobre la base que exigen las conveniencias.

Pero aquí surge naturalmente esta cuestión: ¿Es posible llegar a la unidad monetaria en América?

El Sr. Licenciado Casasús, con la erudición que le ha dado justa celebridad en México y fuera de él, ha sostenido la tesis de que la unidad monetaria internacional es un ideal irrealizable. Debemos entender que se refiere a una unidad aceptada por todas las naciones del mundo, y a un futuro dentro de los límites de la previsión actual, por lo demás el mismo Señor Casasús reconoce la tendencia a la unidad y que ella ha sido lograda por los grupos de la Liga Latina y de la Liga Escandinava, así como que en el pasado existió un gran grupo de naciones, entre las que se encontraban Inglaterra y todas las actuales de la América, que vivían bajo la unidad monetaria del peso mexicano.

¿Por qué ha desaparecido esa unidad aun del mismo México, cuyas tradiciones y cuyo orgullo nacional debieron haberse empeñado en conservar? La contestación a esta pregunta nos llevaría muy lejos; a mi propósito basta hacer

algunas observaciones: la primera es la ya apuntada de que la unidad existió donde los intereses, más que una autoridad común, la impusieron. Segunda, que rota esa primitiva unidad, vuelve ahora a presentarse la tendencia a rehacerla, siguiendo siempre la línea del interés, según es entendido en cada país; pues en tanto que el Perú adopta la libra esterlina, y Chile acepta como unidad el peso de 18 peniques, Cuba, Nicaragua y Panamá adoptan la ley de 1.50464, que es la del dólar americano. Tercera, que las profundas perturbaciones monetarias sufridas por los pueblos latinos en América, hacen que en la actualidad sus sistemas de moneda se hallen en estado amorfo, podría decirse así, dispuestos a recibir la forma del molde a que los ajuste el conjunto de nuevas condiciones: y cuarta y final, que el respeto a la tradición, que es una gran fuerza social en pueblos como Inglaterra, no lo es por desgracia en la América Latina en general.

El mal de nuestras repúblicas consiste precisamente en que carecen a veces de fuerzas conservadoras; una fiebre de novedad lo arrasa todo; las ideas más avanzadas, aunque más discutibles y discutidas, encuentran a los ánimos sin preparación científica sólida, dispuestos a emprender la aventura sin plan ninguno constructivo, y lo único que hacen con seguridad es destruir lo ya existente.

En el frontispicio de la riquísima Biblioteca de la Universidad de Columbia, en Nueva York, se halla una inscripción en que se dice que aquella célebre institución fué fundada, bajo el nombre de Colegio Real, en el siglo XVIII, por el Rey Jorge II de Inglaterra¡ Cuán orgullosos estaríamos nosotros los mexicanos de ostentar ahora la Universidad fundada en México por el Emperador Carlos V en el siglo XVI, conservada por más de tres siglos y que, en lugar de ser reformada, fué destruida por un partido que, por una anomalía de nuestro vocabulario político, se ha llamado Partido Liberal y Progresista!

Estudiando el sistema que sigue en este país el Gobierno para el mejoramiento económico intelectual y moral del indio, he encontrado que lo hecho aquí está calcado en lo que España tenía establecido en México, y que el mismo partido político, lejos de reformar allí, lo destruyó.

La historia, que hace los hombres se enorgullezcan de su país y tengan amor por su pasado, ha desaparecido entre nosotros para dejar el lugar a vanos relatos, no siempre verídicos, o a alegatos que los partidos políticos hacen en favor de su causa respectiva. La generación actual ni de nombre a veces conoce a los hombres que brillaron en la literatura o en las ciencias, siquiera sea a principios del siglo XIX. Ni ha oído hablar de Juan Ruiz de Alarcón, ni sabe que él contribuyó a la formación del teatro francés moderno, ni menos se ha deleitado leyendo las escenas de "La Verdad Sospechosa." Al oir los rumores del movimiento feminista del mundo, ignora que en América fué una mujer mexicana la primera que levantó la voz para protestar en versos inmortales y célebres, contra la humillación de su sexo. Pocos saben explicarse porqué Humboldt encontró en Nueva España a los hombres más ricos del mundo en aquél entonces, en tanto que hoy México presenta el fenómeno desconocido en la historia, de un pueblo que se muere de hambre; y por qué, si en la época colonial los mexicanos emigraban hacia el Norte de América para llevar allí sus ideas y su cultura, si emigraban a Asia para predicar allí sus doctrinas y dejaban allí mártires de sus ideales, hoy sus obreros emigran en busca de sustento, ignorantes de lo que fueron, y por consiguiente, sin tener una idea de lo que serán. Todo por falta de apego a nuestras tradiciones, por falta de lealtad a nuestro pasado, que nos deja sin fuerza de resistencia ante las invasiones exóticas.

Pero si se quiere una prueba más de lo poco que pueden entre nosotros las tradiciones, para que se vea que no serán ellas las que impidan llegar a la unidad de moneda, allí tenemos el caso de la Ley Monetaria de México, que estableció

la cantidad de 75 centígramos de oro puro para nuestro peso. En vano se buscará una razón seria para explicarse de donde vino esa cifra: ella no es la de nuestro antiguo y famosísimo peso, ni tampoco es la de alguno de los países con los que México sostiene activas relaciones: no corresponde a ninguna necesidad de la vida económica interior o exterior de la nación. La Comisión Monetaria encargada de formar el proyecto de ley propuso la cantidad de 752 milígramos de oro puro, para igualar nuestro moneda con el medio dólar de los Estados Unidos; pero alguien cambió aquella cantidad por la de 0.75 gramos, sin otro motivo que el de mera eufonía, de que era una cifra redonda. En aras de la simple eufonía se sacrificaba, pues, por los mismos mexicanos, toda la tradición gloriosísima de su peso que en épocas mejores había regido al mundo.

Al proponer la unidad de la moneda para América no quiero, ni jamás querré, que se acepte algo que nos lleve más deprisa a perder nuestra individualidad hispanoamericana; algo que llege a ser como una bomba de succión de nuestra riqueza. Ante las nuevas tendencias de expansión del capital angloamericano, debemos nosotros disponernos mejor, aprovechando nuestra experiencia con el capital europeo, a defender lo propio. Así lo quiere nuestro interés, así lo quiere el interés mismo de los Estados Unidos, y así lo quiere la justicia, que es el bien para todos. Un pueblo que defiende lo suyo es un pueblo que se enriquece, y enriquece a los que con él comercian. Los Estados Unidos, defendiendo lo suyo, sostienen un comercio más productivo para Europa que muchos de los otros pueblos de la América Latina que no han sabido salir inmunes de la lucha. La razón es obvia; el comercio se mantiene del consumo y el hombre en la miseria no consume nada.

Por eso yo propongo llegar a la unidad monetaria por el camino del enriquecimiento interior, por la vía de la dignificación de la moneda nacional. Así lo quieren, a la vez, el interés y la justicia, y debemos estar seguros de que así lo quiere el pueblo de los Estados Unidos, en quien hablan muy alto los sentimientos de la honradez y del derecho. Me refiero al pueblo de los comerciantes, de los banqueros, al pueblo de los profesores y profesionistas de este país; yo sé que este pueblo se indigna ante la injusticia para con los otros pueblos, cuando tiene un conocimiento de las cosas y puede apreciar en donde está la razón. Es un pueblo que se defiende, y que sabe que sólo la justicia para todos le pueden asegurar la paz y la identidad. Ese pueblo no quiere expansiones territoriales ni predominios imperialistas más o menos disfrazados, que sólo pueden redundar en gloria personal para los políticos o en provecho pecuniario para algunas empresas. Siente profunda simpatía por los pueblos de la América Latina, quisiera su prosperidad, porque en ella y sólo en ella está el bien de todo el Continente. Ama en esos pueblos sus tradiciones españolas; un latino-americano es casi para él una evocación romántica: quiere a nuestros países por lo pintoresco de sus paisajes y por lo pintoresco de sus leyendas y sus costumbres, y el verdadero sabio en los Estados Unidos, comprendiendo la injusticia que los intereses políticos han hecho cometer en contra de las tradiciones españolas del Continente, comprendiendo que en la lealtad de los pueblos latinoamericanos para sus tradiciones está la garantía de su lealtad para con sus amigos de hoy, o sus aliados de mañana, ha hecho justicia a España, y ha reconocido que la política interior de las colonias ibéricas es a la vez un portento de saber y de filantropía. Nuestra literatura provoca aquí general curiosidad y entusiasmo, y la arquitectura de nuestra época colonial es ensalzada en las obras más modernas y artísticas con que se adornan las poblaciones americanas.

Yo creo que el mayor provecho de este Congreso no está, y perdónenmelo sus sabios, en las conclusiones teóricas a que se llegue; está en que podéis

llevar a la América Latina la noticia de la delicada cortesía de este pueblo, del interés que se toma por lo nuestro, del deseo de aprender nuestro idioma, de como sus damas, si poseen alguna palabra del bello idioma que nos dejó España, se empeñan en acariciar nuestros oídos balbuciéndolas.

El interés de este Congreso está todo él en esta proposición que se halla en donde quiera y de mil modos expresada, y que se escucha como el consejo de este gran pueblo: "Lo que vosotros valéis, es por vuestra identidad hispanoamericana, defendedla. La cause de la unidad de la América, la causa de la fuerza de nuestro Continente, espera de vosotros eso, porque América sin la poesía de sus tradiciones españolas no es América; sin lealtad para su pasado no es América; será cuerpo flotante en la dirección de la corriente más fuerte, ora lo lleve por donde se quiera en los Estados Unidos, ora por donde exijan Alemania, Inglaterra o el Japón.

"Hasta hoy son los enemigos de los Estados Unidos los que os han aconsejado defenderos; pero ahora es en nombre de la amistad para este pueblo y del interés de todos que os pedimos vuestra defensa."

Tal es el lenguaje que en frases elocuentes o en acciones más elocuentes aún hemos venido a escuchar a esta reunión.

Por nuestra parte la mejor medida que podemos tener para saber si cumplimos con el deber de nuestra defensa y si contribuímos así a la causa del panamericanismo está en cómo defendamos nuestra moneda y nuestros bienes. Y al referirme a la moneda repito una vez más que no me refiero al tipo teórico de unidad; sino al valor real de las especies circulantes en el interior del país; al valorímetro constante que sirve de expresión a la justicia en las transacciones del comercio interior y exterior. Por eso y, si el cuadro que he trazado de los males de México puede servir de experiencia para el mismo México y para los otros países de la América Latina, precisamente en estos momentos, en que por virtud del cataclismo europeo es de esperarse que venga un nuevo curso de las condiciones económicas, debemos de sacar las siguientes conclusiones como base de una política general bancaria, que espero de esta Sección se servirá aceptarlas:

Primera. Es deseable para el mutuo comercio de los pueblos de América llegar a establecer una moneda de valor uniforme que pueda aproximar el cambio exterior a la paridad.

Segunda. Para que esta uniformidad sea real y mutuamente benéfica, no debe consentirse en que el billete de banco entre en competencia con la moneda real; el billete de banco debe de ser la representación exacta de la existencia metálica, supliendo las necesidades excepcionales de la circulación por emisiones proporcionadas a esas necesidades y que deben retirarse en corto plazo por algún procedimiento, que puede ser el establecido en la ley que reglamenta la circulación, aceptada por el Congreso de los Estados Unidos en 1914, u otro semejante.

Tercera. El Gobierno, mediante una poderosa institución de crédito debe dirigir la emisión, así como también debe moderar la acuñación de moneda para que guarde siempre la relación debida con las necesidades de la circulación y conserve su título.

Cuarta. Los paises en que la depreciación de la moneda es ya un hecho deben procurar volverle su valor por la reducción del número de las especies circulantes, a la vez que por el aumento gradual y consiguiente del valor de esas especies. Con esto nadie resentirá perjuicios y se restablecerá en la nación una medida del valor igual a la de los otros países.

Quinta. Al llevarse a la práctica las anteriores indicaciones deben evitarse las transiciones bruscas y las lesiones de los intereses sociales, arreglando los procedimientos de modo de obtener los resultados en forma gradual y evolutiva.

Sexta. Las reformas indicadas deberán emprenderse no en tiempos de crisis, sino aprovechando los beneficios que produce el restablecimiento del curso normal de los sucesos.

Si aceptáis estas proposiciones creo que habremos colaborado en estos tres nobles propósitos: el enriquecimiento de la América Latina; el predomino de la justicia en el interior de las naciones y en sus relaciones de comercio exterior, y la causa del panamericanismo, porque en la forma convincente de Adam Smith habremos enseñado a nuestros pueblos a cumplir el divino precepto de amarse unos a las otros.

The CHAIRMAN. We are very much obliged to Sr. Obregon for his kindness in presenting to us such a very admirable paper. I have now the honor of welcoming Dr. Manuel Gamio, a representative of the official Government delegation of Mexico, who will do us the honor of helping to preside to-day.

Prof. Kemmerer will speak on the subject "A proposal for Pan American monetary unity."

A PROPOSAL FOR PAN AMERICAN MONETARY UNITY.

By E. W. KEMMERER,

Professor of Economics and Finance, Princeton University.

A century ago Napoleon, looking down from the rock of St. Helena, declared "What Europe most needs is a common law, a common measure, and a common money."[1] To-day to most people a common law seems undesirable; a common measure both for Europe and the Americas is approaching attainment in the metric system, while a common money is widely looked upon as an ideal some day to be realized, but not far this side of the millennium. Fifty years ago the subject of international monetary unity was a live one in Europe and North America; and after the International Monetary Conference at Paris in 1867, which recommended uniformity on the basis of 5 francs of gold as the unit, it looked as if the international monetary unity achieved on a small scale in 1865 by the nations of the Latin Union would be extended, though on a gold basis, to most of the leading States of Europe and North America.

In its essentials the plan recommended by the International Monetary Conference at Paris in 1867, and, independently, by the committee on weights, measures, and coinage of the Paris Exposition of that year, was the international adoption of the gold standard on the basis of a unit represented by the gold content of 5 francs of French coin, all gold coins to be 0.900 fine, and the gold coins of each country entering the monetary union to bear the emblems of that country but to have legal circulation in all the other countries. England was to reduce the pure-gold content of her sovereign by about 0.9 per cent, or approximately 2d. on a pound, the United States to reduce the size of the gold dollar by about 3½ per cent, and France was to coin a 25-franc gold piece.[2]

By this adjustment 5 francs would have been made equal to one United States dollar, and $5 to £1. The result would have been the monetary unification to a very substantial extent of France, most of the French colonies, Great

[1] Quoted by United States Delegate Samuel B. Ruggles in his report to the Secretary of State on the International Monetary Conference of Paris of 1867. (S. Ex. Doc. No. 14, 40th Cong., 2d sess., p. 97.)

[2] H. Ex. Doc. No. 266, 41st Cong., 2d sess., pp. 5–6; and Sen. Ex. Doc. No. 14, 40th Cong., 2d sess., pp. 18–19.

Britain, Canada, Australia, and a number of the other British colonies, the United States, Switzerland, Italy, Spain, Greece, and Roumania. Later to this group there would presumably have been added, on this side of the Atlantic, Argentina, Mexico, Paraguay, Peru, Venezuela, Cuba, Guatemala, Nicaragua, Panama, Haiti, and Santo Domingo, all of whose currencies have been assimilated closely to the franc, pound, or dollar as a unit.[1] Such a wide area of comparative monetary unity would have been a powerful leverage for bringing other countries into line. High official and scientific authorities in England, France, the United States, and other countries favored the proposal;[2] and, had not the British Royal Commission on International Coinage of 1868 sidetracked the plan by an unfavorable report, in the face of strongly favorable evidence and the support of such men as W. Stanley Jevons,[3] Walter Bagehot,[4] and Ernest Seyd,[5] there is a considerable degree of probability that to-day the world would be enjoying at least as great uniformity in its monetary units as in its metric units of measure.[6]

But the opportunity was missed. The United States soon resumed specie payments on the gold-dollar basis of prerebellion days, the bimetallic and silver States of Europe went over to the gold standard, mostly with distinctively national monetary units (aside from the Latin Union and the Scandinavian Monetary Union), and the ideal of international monetary unity has come to be looked upon as one of the dreams of our fathers.

At the risk of being considered a dreamer, I want to revive this subject of international monetary unity—not, however, for the world, but for the New World. I do so because I believe that the arguments advanced in its support half a century ago by such men as W. Stanley Jevons, Walter Bagehot, E. de Parieu, L. Mathieu, Baron de Hock, Samuel Ruggles, and John Sherman are even stronger to-day for the Americas than they were then for the United States and Europe, while the economic obstacles to the adoption of such a plan are much weaker. The present, in fact, is an exceptionally opportune time for Pan American action.

Why, then, is Pan American monetary unity desirable? What feasible plan for greater unity can be formulated? Why is the present an exceptionally opportune time for undertaking such a project? An attempt briefly to answer these questions will constitute the balance of this paper.

Before considering them it should be said that the problem is a difficult and complicated one, and that the best and latest data available to the author on some of the topics are incomplete and not entirely up to date. Since the outbreak of the European war monetary events in Central and South America have moved very rapidly, but reports concerning them coming to the United States have been meager and often inaccurate. Furthermore, the size of the subject and the limited space available for its treatment will compel me often to appear to speak dogmatically when my judgment is purely tentative, and

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[1] Cf. table, infra, p. 259.

[2] Cf. House Ex. Doc. No. 266, 41st Cong., 2d sess., pp. 5 and 6; and Sen. Ex. Doc. No. 14, 40th Cong., 2d sess., pp. 8–10, 82–83, and 106–110.

[3] Cf. Report from the Royal Commission on International Coinage. London: Eyre & Spottiswoode, 1868, pp. 95–103; and Journ. Statistical Soc., 31 (1868), pp. 426–464.

[4] Rep. Roy. Com. Int. Coinage, pp. 107–116.

[5] Journ. Statistical Soc., 33 (1870), pp. 42–73.

[6] "I believe," said Jevons in his testimony before the Royal Commission (pp. 95–96), "that it is the adhesion of the English to the convention that is alone wanted to make it almost world-wide. * * * I think that, for instance, if we accede to the convention there will scarcely be any country that is the least civilised that will remain outside of it, and it seems to me that this would probably be the most practical way of approaching a general solution of the decimal currency question."

to speak in broad and absolute terms when strict accuracy would demand many qualifications. It should be said, therefore, that the plan here proposed is purely tentative and intended merely to provide a basis for future discussion. The principles which must be regarded in such discussion, however, can not be seriously affected by fluctuations in the value of the monetary units to which the principles are to be applied.

I. There are, in addition to many minor reasons, at least five important, though somewhat overlapping, reasons for attempting to secure Pan American monetary unit:

First. Under such a plan current prices throughout Pan America would be quoted in terms of monetary units that people in all countries would readily understand. A business man accustomed to think in terms of one unit now finds it difficult to think in terms of another. For a Venezuelan exporter to quote for a given quantity of coffee a price of so many bolivars and reales means little to the foreign importer accustomed to think in terms of pesos, dollars, milreis, or bolivianos. The foreign merchant knows that the equivalents of the real and bolivar prices in his own money may be computed by reference to what appear to him to be complicated exchange quotations, but until they have been computed the quoted prices mean little to him. They speak a foreign language; he can translate it by an effort, but it is not a language in which he thinks. He can mathematically compute the equivalents, but he does not feel them when the prices are quoted. In discussing this subject before the British Royal Commission on International Coinage, one of the leading export merchants of London said:

> I had an invoice copied out yesterday which I sent last month * * * to an old correspondent of mine in New York. * * * This is the invoice of a variety of goods packed in four casks. The total amount of it is £253, and in the invoice there are 421 different prices making up the £253. My customer who ordered those goods has to form an idea of what every one of those 421 prices sterling will amount to in dollars and cents in New York before he can commit himself to the ordering of them. At the present time he has to go through a complicated calculation to transfer sterling money into dollars and cents, as well as all his calculations of the other fixed charges. * * *
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> There are at this moment in my trade a great number of goods that could be carried profitably to the United States and sold there, but which are not taken there on account of the difficulty of people having to go through the whole study of the prices.[1]

Many a trade opportunity, therefore, passes unrecognized because masked in prices expressed in unfamiliar monetary units. Under a unified monetary system anybody who read a newspaper from any part of Pan America would know what the purchasing power of gold was in that part of the world; he would not only read but would understand the prices current, and would have "the first datum in all mercantile transactions ready to his hand."[2]

International merchants often seek to avoid such difficulties by publishing price lists in foreign monetary units. To such merchants the expense of calculating the prices in different currencies would be avoided. Small traders, moreover, would be freed from much of the difficulty and expense they now experience in keeping a clerical staff conversant with foreign price equivalents; and commercial travelers would be aided in their work of selling their goods in other countries.

Second. Foreign exchange operations would be simplified, and, inasmuch as they all could be easily expressed in terms of premium and discount, the business man would readily understand them and be in a better position to protect himself against unreasonable exchange charges. Ernest Seyd, in a paper on

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[1] Testimony of Alfred Field, Report, pp. 46 and 51.
[2] Testimony of Walter Bagehot, Report, p. 108.

international coinage read before the Statistical Society in London in 1870, expressed the idea well when he said:

The English manufacturer * * * knows little of foreign exchanges [that isn't his business] and, with his single-mindedness of purpose, he soon finds himself entangled in vexatious disputes, either with the drawer or the negotiator; and if, guided by experience, he finally guards himself against these small losses by adding something to the price of his goods, he is by so much hampered in his competition with a foreign producer. It is not too much to say that many manufacturers, after a few trials of this kind, give up foreign trade, because the "money part" is not clear to them.[1]

Third. Another advantage would be in the less frequent need of melting down the coins of one nation, casting the gold into bars, and then later having the bars remelted in order to have the gold coined into the coins of another nation. This substantial item of expense would be largely eliminated under an international union in which the monetary unit of each of the American republics would be assimilated to those of all the others, and in which the standardized gold coins of each would be legally recognized in all.[2] The easy flow of gold from one American republic to another would in this way be facilitated, and the "gold points" in foreign exchange operations would be brought closer together, thus stabilizing exchange to the advantage of all Pan American trade.

Fourth. A fourth advantage would be the stimulus such an arrangement would give to the improvement of the currency systems of the American nations. "It is well," said Jevons, "to have a good currency at home, but to our foreign trade it is equally important that there should be a good currency abroad."[3] The general improvement of all the currencies under a system that would result from international monetary unity Jevons considered to be so great an advantage as to almost eclipse the others.[4]

Fifth. A fifth advantage, and by no means the least, is the fact that such a plan would strongly promote the ideal of Pan American union. The existence of a unified monetary standard, with gold coins bearing the emblems of Pan Americanism circulating throughout the two continents, would be a perpetual symbol of the Pan American ideal.

Other advantages deserving consideration in this connection are: (1) The encouragement such monetary unity would give to the investment of foreign capital in the less developed countries; (2) the assistance it would render in the interchange of scientific statistical information between the American Republics;[5] (3) the convenience in regard to the computation, and the apportionment between the railroads of the different countries, of the freight and passenger receipts on through traffic; and (4) the convenience of travelers whose gold money would be good throughout the 21 American Republics, as is the gold money of each of the Latin Union States in all 5 of them.

II. Such are the chief advantages of monetary unity. The obstacles, however, are very real.

First. There is the strong but natural prejudice each country has for its own monetary unit, a prejudice exemplified in the fact that every country favors international monetary unity, provided that all other countries will adapt their monetary systems to its own unit of value. The United States would be very

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[1] Journal Statistical Society, vol. 33 (1870), p. 44.

[2] Cf. infra, p. 262.

[3] Journal Statistical Society, vol. 31 (1868), p. 437.

[4] Brit. Royal Com. Int. Coinage, Rep., p. 98.

[5] It was in the International Statistical Congresses that the subject of international monetary unity was first seriously discussed. The subject was considered at the Congress of Brussels in 1853, of Paris in 1855, of London in 1860, of Berlin in 1863, and of Florence in 1867.

glad to see all the American Republics adopt the dollar, while Mexico would doubtless be pleased to have them all adopt the peso of 75 centigrams of pure gold, and Peru the pound or the sol. Evidently international monetary unity requires numerous concessions, and the existence of strong national prejudices threatens a deadlock.

Second. The second great obstacle is the positive one of equitably adjusting existing debts to the new monetary unit in the cases of those countries which are called upon to alter their units and the disturbances such alterations bring to established norms of prices and wages. These difficulties are not to be minimized; but fortunately the world has had much experience in making such adjustments, and the lessons of this experience are available for the future.[1] Moreover, much encouragement may be drawn from the fact that the present deranged condition of the currencies in most of the American Republics calls for monetary reform in those countries in any case; and that it will be little, if any, more disturbing to return to a gold basis on a unit slightly changed so as to be assimilated to the gold units of other countries than it would to resume specie payments on the old gold unit. As the British Royal Commission said:

It is obvious that when so many systems of national currency exist, widely differing from each other, a change must be made in the currency of many if not all of the countries which join in any common arrangement. * * * Such a change must necessarily be productive of inconvenience, varying according to the circumstances of different countries. Where the currency has become very much deranged it can hardly be said to be an inconvenience to establish a sound system; where frequent changes of currency have occurred, the inconvenience of a further change in order to establish a permanent or general system is less felt.[2]

III. What feasible plan can be formulated for securing monetary unity in the American Republics with a minimum of disturbance?

The 5-franc basis.—Were there any hope of securing an international monetary union embracing Europe as well as the Americas, the best plan would probably be the one recommended by the Paris International Conference of 1867, that is, the plan to make 5 francs of gold the unit, to reduce the pure gold content of the sovereign by about 0.9 per cent, and that of the United States dollar by about 3½ per cent, thereby making the dollar equivalent to 5 francs and the sovereign equivalent to $5.[3] Such a plan would not only give a substantial degree of monetary unity to Europe, but would afford a basis for extending this unity to the American Republics; since a large number of them have their legal gold units exactly or closely assimilated to the dollar, the pound, or the franc,[4] and might be reasonably expected to alter them slightly in case the gold contents of the dollar and the pound were reduced by international agreement.

Unfortunately, however, there does not appear to be the slighest prospect that the European nations have any desire to take action in the direction of securing monetary unity upon this or any other basis. They have not been interested in the subject for nearly half a century. With the animosities growing out of the present war, the tremendous post-bellum problems to be solved, and the billions of dollars of war debts expressed in terms of existing national monetary units to be paid, assuredly European countries will have no practical

[1] Cf., for an example, E. W. Kemmerer, Modern Currency Reforms, pp. 324–326.

[2] Brit. Roy. Com. Int. Coinage, Rep., p. ix.

[3] By increasing the gold content of the mark approximately 1½ per cent, 4 marks would be made equivalent to 5 francs.

[4] Assimilated to the pound are the legal units of Bolivia, Ecuador, Colombia, Peru, and Salvador; assimilated to the franc are the legal units of Venezuela, Argentina, Haiti, and Paraguay; assimilated to the dollar are those of Cuba, Nicaragua, Panama, Santo Domingo, and Canada. Cf. table, infra, p. 259.

interest for a long time to come in such "idealistic schemes." If monetary unity is to be obtained in the western world in any reasonable time it must be obtained as a result of a Pan American movement, not a world movement.

As a purely Pan American proposition a gold 5-franc piece would not be a satisfactory unit. It would conform exactly or in multiples of five only to the monetary units of Argentina, Haiti, Paraguay, and Venezuela, and of these four nations only Venezuela is actually on a gold standard. Its adoption therefore would require the melting and recoining of practically all the two billion and more dollars worth of gold coin in the New World.

The dollar basis.—A concise picture of the character of the monetary units of the 21 American Republics and Canada appears in the following table.[1]

A study of the table will show six noteworthy facts:

(1) Every country but one, Honduras,[2] is legally upon the gold standard.

Monetary unification.

Country.	Population. (1)	Legal monetary unit.			Actual unit.		Proposed unit.		
		Name.	Fine gold.	U. S. currency value.	Character.	U. S. currency value.	Fine gold.	U. S. currency value.	Increase or decrease.
			Centigrams.				*Centigrams.*		*Per ct.*
Argentine	9,000,000	Peso	145.16	$0.965	Paper	a $0.440	150.46	$1.00	+3.7
Bolivia	2,300,000	...do	146.45	.973	...do	a .314	150.46	1.00	+2.9
Brazil	24,300,000	Milreis	82.21	.546	...do	a .250	75.23	.50	−8.5
Chile	3,500,000	Peso	54.92	.365	...do	a .179	60.18	.40	+9.6
Colombia	5,500,000	Dollar	146.45	.973	...do	(b)	150.46	1.00	+2.9
Costa Rica	400,000	Colon	70.02	.465	Gold	a b .465	75.23	.50	+7.5
Cuba	2,500,000	Peso	150.46	1.000	...do	b 1.000	150.46	1.00	0.0
Ecuador	1,500,000	Sucre	73.22	.486	Paper	b .463	75.23	.50	+2.7
Guatemala	2,100,000	Peso	145.08	.964	...do	....	150.46	1.00	+3.7
Haiti	2,500,000	Gourde	145.16	.965	Paper and U. S. gold.	b 1.000	150.46	1.00	+3.6
Honduras	600,000	Peso	Silver.	Varies.	Silver	a .398 (Nov. 29)	75.23 or 60.18	.50 or .40	
Mexico	15,400,000	...do	75.00	.498	Paper	....	75.23	.50	+0.3
Nicaragua	700,000	Cordoba	150.46	1.000	Gold	b 1.000	150.46	1.00	0.0
Panama	400,000	Balboa	150.46	1.000	...do	b 1.000	150.46	1.00	0.0
Paraguay	800,000	Peso	145.16	.965	Paper	(b)	150.46	1.00	+3.6
Peru	5,800,000	Libra	732.25	4.866	...do	.437 a b (sol)	75.23 (sol)	.50	+2.7
Salvador	1,200,000	Dollar	146.45	.973	Fiduciary silver.	.350	150.46	1.00	+2.9
Santo Domingo.	700,000	...do	150.46	1.000	Gold	b 1.000	150.46	1.00	0.0
Uruguay	1,200,000	Peso	155.57	1.034	Foreign gold	(b)	150.46	1.00	−3.5
United States.	100,000,000	Dollar	150.46	1.000	Gold	1.000	150.46	1.00	0.0
Venezuela	2,700,000	Bolivar	29.03	.193	...do	b .193	30.09	.20	+3.7
Canada	7,200,000	Dollar	150.46	1.000	...do	b 1.000	150.46	1.00	0.0

a Latest figures available. b United States gold in legal circulation.

[1] The data for this table were collected from a variety of sources, the chief being the United States Director of the Mint Reports, and Compilations on the Monetary Systems of the World; the Statesman's Yearbook for 1915; The Pan American Union, passim; the United States Statistical Abstract for 1914; The London Economist, passim; the "Special Agents" publications of the U. S. Bureau of Commerce; and information sent me directly through the courtesy of the ministers of the various countries to the United States.

[2] Honduras in recent years has been active in a Central American movement for monetary unity among the Central American countries, on the basis of a gold unit equivalent to the United States gold dollar. On this subject there have been two Central American international conferences at Tegucigalpa, Honduras, one in 1909 and one in 1910. Cf. Bulletin of the International Union of the American Republics, April, 1909, pp. 725–727, and American Journal of International Law, 1910, Supplement, p. 170.

(2) Eleven of the 21 Republics, so far as most of their business is concerned, are actually upon a depreciated paper money basis; one, though legally on a gold basis, is actually upon a fiduciary silver basis, and one is both legally and actually upon a silver basis. Twelve of them, therefore, are gold standard in name but not in fact. These 12 Republics which are upon a depreciated money basis represent 73,900,000, or 89 per cent, of the 83,100,000 population in all the Republics outside of the United States.

(3) Eight Republics and Canada are in fact as well as in name upon a gold standard.

(4) In five of these gold standard Republics, viz., Cuba, Nicaragua, Panama, Santo Domingo, and the United States, also in Canada,[1] together representing 111,500,000 people or 96 per cent of the 115,800,000 actually on a gold standard, the United States gold dollar or a unit of exactly the same value is both legally and actually the monetary unit.

(5) There are three Republics which are both legally and actually upon a gold standard whose monetary units are of a different gold value than the United States gold dollar. Together they represent a population of 4,300,000, or 3.7 per cent of the people in countries actually upon a gold standard. These three Republics are Costa Rica, Uruguay, and Venezuela. In Costa Rica foreign gold coins are legal tender, but United States gold coins are the only foreign coins that actually circulate in the country. United States gold coins, moreover, as also the gold coins of certain other countries, circulate in Uruguay. In Venezuela United States gold coins circulate on conditions of legal equality with Venezuelan gold coins. Other foreign gold coins are also permitted to circulate in Venezuela. This leaves no country of Pan America which is actually as well as legally upon a gold standard in which the United States gold dollar or coins representing its exact equivalent or integral multiples do not circulate either as the unit of value or as legally recognized foreign coins.

(6) A sixth point to note in the interpretation of the table is that the gold-standard countries at present using the gold dollar or its equivalent as their monetary unit, possess approximately four-fifths of the total gold coin in circulation and in the banks in the 21 American Republics and Canada.[2]

The situation throughout the Americas as shown by the table is, therefore, favorable to Pan American action in the direction of monetary unity.

If we may assume that there should be adopted as the basic Pan American unit, a monetary unit represented by coins in actual circulation rather than some new and ideal unit like the gram or dekagram of pure gold (a conclusion reached by unanimous vote after debate at the Paris Monetary Conference of 1867[3]), the weight of the argument for Pan America would seem to be strongly in favor of

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[1] At this writing the exchanges show a very slight depreciation of the Canadian notes—less than one per cent. This depreciation, however, does not seem to be sufficient to justify the inclusion of Canada among the countries with de facto paper money standards.

[2] Estimate based upon figures collected by the Director of the Mint, and published in his annual report for 1914, *passim*.

[3] The vote of the nations was unanimous in favor of the following proposition: "It is more easy to realize monetary unification by mutual coordination of existing systems, taking into account the scientific advantages of certain types, and the numbers of the populations which have already adopted them." House Ex. Doc. No. 266, 41st Cong., 2d sess., p. 4.

Baron de Hock, delegate to the Conference from Austria, said with reference to the adoption of an ideal metric unit: "In Germany we find a striking example: there was a wish to introduce into the German states a coin not correspondent with any existing types. Although it was the most rational, and accorded perfectly with the metric system [being a gold crown containing 10 grams of gold], it could not find its way into calculations. The gold crown only passed from the mint to the melting pots of the goldsmiths." Ibid., p. 8.

the United States gold dollar. It is to-day by far the most important gold unit on the American continents, circulating in larger quantities several times over than the gold coins of all other units combined; a unit of this size is legally current in more American countries than any other gold unit; and at present it is used by countries representing approximately 60 per cent of the total population of the 21 American Republics and Canada. Moreover, the dollar is a convenient-sized unit, not so large as the sovereign nor so small as the franc, and is coined into pieces of the most approved millesimal fineness—i. e., 0.900. There is more foreign trade between the 20 other American Republics and the United States than between those 20 Republics and any other country.

The kinds of changes in existing legal monetary units of the American Republics that would appear to be necessary in order to assimilate them to the value of the United States dollar are shown in column 4 of the table. Most of the changes would be slight and if scientifically managed should cause little disturbance. No changes would be required in the monetary units of Cuba, Nicaragua, Panama, Santo Domingo, the United States, and Canada.

Those countries which are actually on a depreciated paper money basis, or on a silver standard, and are striving to come to a gold standard, would not suffer much inconvenience in slightly modifying their present legal units so as to assimilate them to a Pan American unit. Their de facto paper and silver units must be raised in any event, and to raise them to a slightly different gold level than would otherwise be the case, in order to bring them into conformity with the Pan American unit, should not be a procedure fraught with much difficulty. These remarks apply to Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatamala, Haiti, Honduras, Mexico, Paraguay, Peru, and Salvador. In five of these countries—Colombia, Ecuador,[1] Haiti,[2] Salvador,[3] and Paraguay[4]—United States gold coins are already found in circulation.

The only disturbing alterations of national monetary units called for, therefore, would seem to be those of Costa Rica, Uruguay, and Venezuela. In Costa Rica the legal unit would need to be raised about 7.5 per cent to make it equal to 50 cents, a change, the apparent seriousness of which would be considerably mitigated by the fact that United States gold coins already circulate in the country, are unlimited legal tender at their equivalent value in colones, and are familiar to the people. In Uruguay a reduction of about 3.5 per cent in the gold content of the legal peso would need to be made to make it equal to the dollar. Inasmuch, however, as there are no Uruguayan gold coins in circulation, and as the real money of account is foreign gold coins, including those of the United States, at their proper values in local money, this adjustment should not be difficult. In Venezuela an increase of about 3.7 per cent in the gold content of the bolivar would assimilate it to the dollar, making it equivalent to 20 cents. Here, likewise, the people are familiar with United States gold coin.

In two of the three countries in which an alteration in the de facto gold unit is suggested—i. e., in Costa Rica and Venezuela, the alteration suggested is for

[1] United States gold coins, as also those of England and certain other countries, legally circulate in Ecuador, and are receivable at their equivalents in sucres for Government dues.

[2] In Haiti none of the national gold coins authorized by the law of 1880 have ever been coined. United States gold coin is current, and must be used in payment of all export duties, the import surtax of 25 per cent and an additional 15 per cent, some salaries, and a considerable number of other items of the budget. The Monetary Systems of the Principal Countries of the World. Compiled in the office of the Director of the Mint. Washington: Government Printing Office, 1912, p. 22.

[3] United States gold coins are receivable for public dues in Salvador.

[4] By Act of Dec. 30, 1876, United States gold coins are legal tender in Paraguay and receivable for Government dues. They circulate only to a very slight extent.

an increase in the gold content of the unit. For Costa Rica the increase would be 7.5 per cent, and for Venezuela 3.7 per cent, the latter being less than 1 per cent more than sufficient to compensate creditor and wage earner for the average annual depreciation of gold as expressed in the rising cost of living during the four years preceding the European war—i. e., the last normal four-year period for which figures are available.[1]

The transition once having been effected and the return to the gold standard accomplished, all the American Republics and Canada would be on a gold basis, with their gold coins all .900 fine, and all divided decimally. The unit of each country would be either a simple fraction like ½, ⅕, or ⅖ of those of the other countries, or an easy multiple. All the unitary equivalents would be simply expressed and easily calculated. A United States gold eagle would be equivalent to 10 Argentine or Paraguay pesos, 20 Brazilian milreis, or Mexican pesos, or Costa-Rican colones, 25 Chilian pesos, or 50 Venezuelan bolivars, etc.

A permanent Pan American monetary commission composed of a representative from each nation belonging to the monetary union might well be formed, whose duty should be to examine from time to time the gold coins minted by the different nations and to report any undue discrepancies from the legal weights and millesimal fineness. Nations whose gold coins conformed to the legal standards agreed upon, and so long as they did conform, might be authorized by vote of the Pan American Monetary Commission to qualify their gold coins as Pan American gold coins. This would be done by stamping upon the national coins some such words as "Pan American Union," and the value of the coins in terms of the Pan American monetary unit, which might be given some such name as an oro (the Spanish word for gold). Pan American gold coins would be made receivable for Government dues at their legal values in terms of national money in all nations belonging to the monetary union, and, in the course of time, might perhaps also be made legal tender throughout the Americas.

The advantages of international monetary unity, like those of uniformity in weights and measures, are so great that some time it is bound to come, although it may be accomplished slowly—a few countries at a time. The present is a particularly opportune time for its attainment in Pan America. In bringing it about, the Republics of the western world would set an example to Europe, and would, incidentally, in the course of time, send into every home in the American Republics frequent messengers in the form of Pan American gold coins that would be standard bearers of Pan Americanism.

THE TAXATION OF BUSINESS.

By THOMAS S. ADAMS,

Professor of Political Economy, Sheffield Scientific School of Yale University.

In its widest connotation the word "business" is practically synonymous with economic activity, and a discussion of business taxation in that sense would be nearly coterminous with the entire field of taxation. To make the subject

[1] For the four years 1910–1913 the average annual depreciation of gold, as shown by leading price index numbers, was: England, 3.9 per cent; France, 3.2 per cent; Germany, 2.4 per cent; Canada, 2.4 per cent; and the United States, 1.9 per cent. For the five countries the rough annual average was 2.8 per cent. Figures are not available for the South American and Central American countries. The index numbers used for the above five countries, respectively, were: Sauerbeck, Annuaire Statistique, German Customs Union, Coates (weighted), and Bradstreets. Cf. Bulletin No. 173 of the United States Bureau of Labor, on Index Numbers of Wholesale Prices in the United States and Foreign countries, *passim*.

manageable it is necessary to limit it to the taxation of mercantile, manufacturing, and miscellaneous competitive business pursuits, eliminating such business activities as agriculture, mining, forestry, banking, insurance, and public-service enterprise. The treatment is confined so far as possible to pure taxes. Government monopolies, sumptuary taxes designed to encourage industry, and quasi rental charges employed to measure the value of privileges or franchises conferred by the State, are not considered.

I. Fiscal history, practice, and sound theory, it is believed, unite in supporting certain general principles which should control this department of taxation.

First of all, business will be and should be taxed. Adherents of the single tax, subtly seconded by certain business interests themselves, maintain that business should be exempt from taxation. In the writer's opinion there is no warrant for this claim either in theory or practice. A large part of the cost of government is traceable to the necessity of maintaining a suitable business environment. Historically the city has been evolved largely for this purpose. Moreover, business is responsible for much of the work which occupies the courts, the fire department, the police, the army, the navy. New business creates new tasks, entails further public expense. A small amount of new business may not show its influence at once upon public expenditures. The relationship between business and the cost of government is a loose one, much like the relation between the expenses of a railroad and the amount of traffic which it carries. The connection, however, is real and in the long run the more business the greater will be certain fundamental costs of government. In consequence the industry which does not pay its due share of the public expenses is in the long run a source of weakness, not a source of strength.

Reasonable taxation imposed in a spirit of fairness does not drive business away, and mere exemption does not attract new business. Business interests, particularly large industrial concerns, are infinitely sensitive to any exhibition of unfairness or lack of good faith on the part of government. Such business, on the other hand, ordinarily expects and is not repelled by a firm and equitable insistence on the part of government that it shall assume a fair share of the expenses of government. Among the factors which control the localization of business, taxation is ordinarily a minor element; proximity of markets, convenience of transportation facilities, access to cheap raw material, skilled labor, and banking institutions conversant with and favorably disposed to the business in question—these are the controlling considerations.

Whatever be our theory on the subject, fiscal history proves that the people and authorities of the average city or State will not in the long run permit its business opportunities to be exploited without imposing a charge therefor. The immunity that is frequently offered to the new industry when it is merely an alluring prospect is nearly always withdrawn when the new prospect becomes a fixed and prosperous institution. Under exemption, business adjusts itself to a certain mode of life—a certain standard of cost and expense which is practically certain at a later time to be sharply increased by the withdrawal of the exemption. The democratic or liberal governments of modern communities will not permanently tolerate within their borders the spectacle of large and prosperous business enterprises freed from the fiscal burdens which the ordinary man must bear. It is fitting and proper that a new business enterprise should be treated leniently in the constructive and developmental stages, during which expenses are heavy and receipts light. But this should be accomplished by a rational system of taxation and not by unstable and informal grants of immunity for ill-defined periods which are almost certain to be withdrawn, and in the withdrawal to engender hatred of capital on the part of the public and, on the part

of capital, charges that contracts have been broken and good faith violated. Each new business enterprise should grow up in an atmosphere of taxability, assuming greater burdens as it passes from infancy to maturity.

Surveyed historically, there seems discernible in business taxation two major motives or demands—one represented by a benefit tax, the other by an ability tax, the former imposed as a share of the expense of maintaining an environment suitable to business, the latter as a claim upon profits at the place where they are earned. There are doubtless other factors in the social feeling which make business taxation inevitable, but these seem to be the major factors.

While it is impossible to measure accurately the benefit which government confers upon business, it is practically inevitable that some general charge designed to cover these benefits should be imposed. This particular charge need have no necessary relation to the success or profit of a particular business enterprise. Government creates an environment suitable to business; a particular business concern utilizes that environment; whether profit is won or loss sustained, use has been made of the environment and the price should be paid. The canons of taxation are not all exhausted by the maxim that taxation should be in accordance with ability. There is a sterner and harsher ingredient that must be preserved: Persons that exploit a situation, use property, or take advantage of a "conjuncture" created or maintained by the public must pay for this privilege whether they use it wisely or unwisely. Part of the proper function of taxation is to weed out the improvident enterpriser and place wealth and commercial opportunities in the hands of those who can use them to advantage. This is, of course, only part of the truth, but it is a necessary part. There is in the tax system a necessary and desirable rental element or benefit factor, impersonal, unaffected by ability to pay, attaching to things rather than persons.

II. No great stress is laid upon the theoretical analysis just presented. It may be unsound. There is, however, in the actual practice of business taxation a discernible trend to measure the benefit of which we have spoken by reference to real estate in one form or another. In some countries, particularly the United States, effort is still made to impose the tax, not upon real estate, but upon the entire mass of property. This species of taxation, used for many centuries in Europe but for the most part discarded there, has proved an utter failure in North America. Speaking generally, there is no State in the American Union and no Province in Canada in which the entire mass of personal property may be said to be successfully assessed and taxed. The attempt to tax the personal property of business concerns has been particularly unsuccessful. It is practically impossible to secure assessors or appraisers who are familiar with the values of all kinds of busines equipment and property. Efforts to improve the administration of the general property tax do not make it more satisfactory as they approach realization. The better the enforcement of the tax the worse the tax in many respects. Experience thus proves that the general property tax is not only exceedingly difficult to administer, but is also defective in theory.

It will be recalled that we are not here speaking of farming or agricultural business. Farm animals are in many American States assessed and taxed as accurately as real estate itself. Speaking generally, where any one industry dominates a community assessors and appraisers are likely to be so familiar with it that the tax on personal property may be nearly as effective as the taxation of real estate. But as soon as industry diversifies and we get the complex industrial characteristics of the modern business community personal property and business equipment become so varied as to baffle the appraiser

or assessor. Most personal property, moreover, yields no rent. Land and real estate may ordinarily be taxed on the basis either of capital or annual value; capital value is checked by rent and rent by capital value; the tax may be imposed on either basis, and the two sets of facts are mutually corrective. We have no annual or rental value for most forms of personal property, however.

We conclude, then, that the benefit element is best satisfied by taxation of real estate, and that the inclusion of personal property is a mistake—a practical mistake because of administrative difficulties; a theoretical mistake because real estate can and ordinarily does bear a much higher rate of taxation that can be successfully borne by personal property.

III. With respect to that element of business taxation which is adjusted to earnings or ability, the trend of practice is plainly toward the direct taxation of net income. Most countries of Europe now employ the income tax in part for this purpose; the Government of the United States does likewise, and the indications are that taxes upon net income will be rapidly introduced by the various State governments in the near future. Such taxes have already been adopted by Wisconsin, Connecticut, and West Virginia. Where the net income tax is not employed in that form, it is plain that the substitutes used in its place are animated by the net income principle. Classes are differentiated and rates selected on the basis of net income. This is avowedly the criterion which has controlled the formulation or modification of the Prussian and French business taxes. Even in this country, where rough and inelastic license taxes are imposed, there can be little question that they are aiming, though in a very imperfect way, at taxation in accordance with ability as measured by net income—to the extent that they are not controlled by sumptuary considerations or the desire to repress consumption not altogether approved by the community.

Passing to more concrete practical questions, the first problem expresses itself in these terms: Shall the benefit and ability ideas be represented by separate taxes or shall they be fused in a single tax? Two taxes should be employed, we think, except where real estate is so specialized that it can not be said to have a value apart from the business by which it is utilized. Mines and quarries, for instance, represent real estate which ordinarily has no value apart from the business of mining and quarrying. In this industry a tax upon gross receipts may well be used to satisfy the two demands or purposes which have been distinguished. The same is true of railroads and a number of other public utilities in which the land employed is indistinguishably combined with other equipment and properties. Here a tax upon gross earnings may be satisfactorily employed to serve both purposes. In general, however, better results are achieved when the two kinds of taxes are plainly distinguished, and in many countries the tax upon real estate or property is assessed by a set of officials other than those which assess and administer the business tax proper.

IV. In considering business taxes in the narrower sense—i. e., as supplemental to a benefit tax laid upon real estate or the annual rental thereof—the first question which arises is whether the tax should be placed directly upon net income or be laid in accordance with certain external indicia used to obviate the inquisitorial necessity of requiring a detailed declaration of revenue and expense. Practice and experience seems to make it plain that a tax measured by external indicia is preferable for very small business enterprises (in which accurate accounts are not kept), and in those jurisdictions where tax officials are untrustworthy and inclined to use confidential information to exploit the taxpayer or in other illicit ways. For larger business concerns and in juris-

dictions where competent and trustworthy tax officials may be secured, we believe that the direct tax on net income is preferable for the following reasons:

It imposes a light burden, or no burden at all, upon the small business concern, upon new business ventures, and upon all business in bad years when no profits are earned. This does not lead, it should be noted, to marked fluctuations of yield. One might expect the product of net income taxes to vary greatly with business conditions, but experience and financial statistics show that taxes upon net income are surprisingly regular and stable. Fortunately for the treasury, business depression affects different lines of industry at different times. The tax does vary with commercial prosperity and the yield in one year is not unlikely to be less than in the preceding year, but the variation is not great; in fact, no greater than is desirable from the standpoint of business itself.

Contrary to popular opinion, a tax upon net income is not particularly complex or particularly difficult to appraise, compared with other direct taxes. With most business concerns net income is a matter of record, and while its computation necessarily involves certain elements of estimate (relating particularly to depreciation, losses for bad debt, revaluation of capital assets and the like) the margin of uncertainty is much narrower than in the valuation of real estate or in the determination of the annual rental of a piece of real property occupied or used by its owner. The valuation of real estate is almost wholly an estimate, a mere affair of human judgment, and expert appraisers frequently differ in their valuations by 25 or 30 per cent. The determination of income is largely an objective measurement of receipts and expenditures which have actually taken place. The appraisal of net income sometimes seems more complex than the appraisal of property merely because in income-tax laws it is customary, while in property-tax laws it is not customary, to insert detailed rules prescribing the method by which troublesome problems are to be solved.

Finally, it will be noted that income taxes are not shifted to consumers, but are usually borne by the taxpayers; that they satisfy our sense of justice; and that when once introduced they are not likely to be abandoned. These considerations are of far more importance in practice than is usually understood. We are apt in matters of taxation to dismiss nice considerations of equity with a contemptuous wave of the hand. This is a great practical mistake. Officials will not resolutely or efficiently enforce taxes which they know to be inequitable. Taxpayers will evade inequitable tax laws where they would make no determined attempt to evade an equitable law. Most important of all, an equitable direct tax based upon a sound general principle is likely to endure, whereas an indirect tax offers an irresistible invitation to the introduction of new taxes. Here is the weakness of such indirect imposts as stamp taxes upon transfers, checks, and the like. They may be introduced in the first instance as a substitute for taxation upon business; but in the long run they are apt to be followed by direct business taxes. Modern democracy is not satisfied with the indirect payment of taxes; you must not only pay, but it must be known to all the world that you pay. Indirect taxes do not permanently take the place of direct taxes. The class upon which they are first imposed as a substitute is eventually taxed directly and the indirect tax remains as an addition to a class of taxes which is already in many places too large.

Business taxes belong in large part to local or municipal as distinguished from national governments. Can the income tax be safely used as a local tax? The answer is "yes," provided the distribution of the tax, or the taxable income, among different localities is controlled by a higher jurisdiction or the

central government. With the development of large corporations doing business in many jurisdictions, this aspect of taxation becomes increasingly important. It raises the most difficult problems connected with income taxation. But it creates no insuperable difficulty provided the central government establishes by law such general rules for the localization of income as will prevent double taxation. There is no reason at all why both the national and local governments should not use income as a basis for taxation, the national government dividing up or apportioning the income of any enterprise which does business in more than one municipality. Almost any reasonable rule of apportionment will serve provided it is applied uniformly, and provided representation is given to all elements of business. It is particularly important that some income be assigned to the place where business arises.

A large business, for instance, may have its manufacturing plant in one jurisdiction, its main offices in another jurisdiction, and may sell large quantities of goods in a third jurisdiction. Experience proves that in the long run all three jurisdictions will insist upon collecting some tax. Thus a problem of considerable magnitude has been created in England by the location there of branches of American manufacturing companies which bill goods to their English branches in such a way that little or no profit is assigned to England. The natural remedy for this situation is to insist upon a consolidated or joint accounting which assigns a correct or fair share of the profits to each department or jurisdiction. The exact rule by which this is accomplished is less important than the uniform application of one rule, designed to prevent evasion and to treat like cases in like manner. In general the larger the jurisdiction which controls the administration of an income tax the better, but with a general income tax there is no reason why local surtaxes should not be imposed, or no reason why the general tax should not be divided up for local use.

Finally, care should be taken that double taxation does not arise through confusion of business and personal taxes. Income taxes are frequently used to measure the fiscal obligation which individuals owe to the jurisdictions in which they live, as well as the obligation which they owe to the jurisdictions in which they earn their income. No trouble arises so long as these distinguishable claims are kept separate. But double taxation of an obnoxious sort arises when the person who earns his income in the jurisdiction in which he resides is taxed only once, while a person who earns his income in a jurisdiction different from that in which he lives is taxed twice. This is a cardinal defect of many taxes, and is not applicable to the income tax alone. The solution is a single tax divided equitably between the two jurisdictions, or a dual system of taxes on separate bases. A single income tax may be levied for both purposes, the residence jurisdiction taking a part and the business jurisdiction taking the remainder; or two separate taxes may be imposed, in which case the person who earns his income in the jurisdiction in which he lives should pay both taxes.

In this connection a strong case can be made for the doctrine that the two obligations (or taxes) are distinct and different things. Construed as a business tax, for instance, the income tax is a real tax. Rental from real estate should be taxed where the real estate is situated; interest on bonds and other debts secured by tangible property should be taxed where the property is situated or the business carried on; and artificial business concerns, such as corporations, should be taxed where their profits are earned. An individual income tax, however, construed as an ability tax, should tax all the income of an individual at his residence wherever this income originated, full deductions for all interest paid should be granted, and no tax should be imposed

upon corporations, partnershsips, and other composite or artificial personalities created merely for the purpose of doing business. In this interpretation the corporation becomes a mere channel through which realized profit is conveyed to the ultimate beneficiary—the shareholder.

V. It is an indispensable condition of successful income taxation that rates should be moderate and tax officials efficient. With these conditions satisfied, the writer maintains that the income tax is not only more equitable but simpler, more certain, and more practicable than highly graded, complex, objective taxes such as those based upon the French *impôt des patentes*. It is simpler in many cases to determine the net income of a business concern than to decide in what grade or group it should be classified. Most manufacturing businesses to-day have highly organized selling departments, while many large mercantile or trading corporations maintain their own factories. Should such concerns be classified as manufacturing or mercantile businesses? The average private banker frequently engages in a brokerage business as well, and in many cases is immediately interested in importation and trade of a diverse character. Which aspect of the business should control its classification? Moreover, the external indicia employed—e. g., population of the city or district—frequently have only the faintest connection with the taxable capacity or taxable earnings in question. As for the taxpayers' association or guild (*steuergesellschaft*) used in Prussia and in many adaptations of the French *impôt des patentes* (particularly in Spanish speaking countries), they appear to create as much dissatisfaction in some countries as satisfaction in others. The small business man in some places is more likely to be exploited by his fellow business men than by the Government official, and has more to fear from competitors obtaining his trade secrets than through the declaration of business details to an official of the Government sworn to secrecy.

It is obvious, however, that in some places tax officials are so incompetent, business bookkeeping so inadequate, or the resistance of business men to income taxation so great, that approximations to the income tax or taxes based upon external indicia must be employed. Where this is done a single base should, if possible, be used. Simplicity, certainty, objectivity become the controlling criteria, and these qualities should not be suppressed or lost by an itching desire to make the tax resemble the more equitable income tax. Such attempts are almost sure to create complexity and uncertainty without securing a real approach to income taxation. There is no evidence that highly graded and complex business taxes like the French business taxes are any more satisfactory than simpler taxes based upon the rental value of the business premises alone, or upon floor space occupied, as in Canada, or upon gross sales or receipts, as in many of the license taxes of our Southern States.

The cardinal defect in these taxes based upon indicia is found in their adoption without sufficient preliminary study by the legislative authority. If they must be adopted, it is highly advisable that reputable business men in each industry be taken into consultation prior to the adoption of the law and be asked to select the external index which is the most accurate and convenient for the industry in question. Business men who would oppose the introduction of an income tax, and who would resent or refuse to make declarations of net income year after year, will frequently cooperate heartily on the adoption of the law in furnishing all the details necessary to place an objective tax of this kind upon the soundest and most convenient basis obtainable. In almost every line of business some simple unit or index has been developed in accordance with which members of the industry or trade itself are accustomed roughly to measure its volume and product. Ordinarily this should be employed as the

basis of the tax. In general, far greater use may probably be made of gross earnings or receipts as the basis of taxation. In many lines of business there seems no objection to making public statistics of gross business, where the utmost objection would be registered against a requirement to declare or return figures showing the net income. Taxes upon gross income, therefore, may well serve as an intermediate step between archaic conditions and the ideal condition of a net income tax scientifically formulated and efficiently administered.

The CHAIRMAN. The Chair is now glad to throw open to discussion all the papers that have been read and will be glad to hear any delegate on any of the topics either in English or in Spanish.

Señor Casasus addressed the section in Spanish. (Not reported.)

Mr. V. GONZALES. Mr. Chairman and gentlemen, I absolutely agree with my companion, Mr. Casasus, who has just addressed the section in Spanish. I believe that the unification of the money of Pan America is impossible, inconvenient, and unnecessary. The reform of monetary systems is nothing new for me. I was instrumental in changing the money of Peru and Ecuador about 20 years ago, and my experience at that time compelled me to study the matter thoroughly. At a time when the people did not understand what the gold standard meant I had to face many difficulties in trying to convince them of the necessity of adopting a stable money. I convinced them at last, and two years after the beginning of my endeavors the new unit was adopted on the basis of gold, but to do that we took things as they were.

The former unit of money of Peru was the sol of 48 pence, which, the value of silver going down, had been reduced to 24 pence, and we adopted the unit in relation to 24 pence; in fact, we cut the sol in two. I had a great struggle, as I have said, with the people because they could not understand that you could make 1 sol gold of a value of 24 pence. They thought that the sol always had to be 48 pence, and they tried to secure a unit of the value of 48 pence. I told them, "It is impossible"; but it is difficult to convince people who are earning 40 cents a day silver that 20 cents in gold is absolutely the same. However, after a great deal of trouble, the least of which was that I was put in prison, I moved the people. I worked the matter from the bottom to the top. The Government became jealous, thinking that I was trying to overthrow the Government, although I was only 27 years old, and I was put in prison to be silenced. I had to give my word of honor that I would not speak any more, but I did not give my word of honor not to write, and a few tons of paper convinced the people.

England, which, as we have heard, has never agreed to change its standard of money, has never had any difficulty with the other countries of the world which do not use the pound sterling. Now, Can-

ada having the dollar, India having the rupee, and Australia and South Africa having the pound sterling, the one section does not have any greater facilities than the other in trading with England. The money of the United States as compared with the money of England and France and Germany is absolutely different, but they never have any difficulty at all.

The unification of the money of South America or of Latin America with that of the United States is absolutely impossible. You can not change the value of the obligations contracted, the taxes, the rents, and the wages of the people. Why should there be a conversion of 3½ per cent, as would have been the case with the money of this country years ago to make the dollar equal 5 francs in order to bring about something with which the people do not agree? In the case of other countries there would have to be a change of 10 per cent, 8 per cent, or 6 per cent, and who is going to pay that difference—the poor man or the rich man? The rich man will not pay it; it will be the poor man who will pay it.

When we changed in Peru from the silver standard to the gold standard I made a campaign of two years, but I won the fight because I sided with the people. I was a landowner, and my interest was that the bad money should prevail, and I would pay my people in silver and my goods exportable would be paid for in gold. The more silver fell the more sols I got for my goods, but I appealed to the people, and I told them I was making their fight—I was young enough to be unselfish—and at last, after two years, I succeeded in getting the law adopted, and two years afterwards absolutely the same law was adopted in Ecuador. That is the reason why you find the value of the Peruvian sol and the Ecuadorian sucre absolutely the same. I am happy to be responsible for that condition.

If you analyze the chart prepared by Prof. Kemmerer it will be found that it contains a few mistakes, but I do not think it necessary to point them out. Prof. Kemmerer states that he has procured the information on which the chart is based from different sources and a few mistakes do not amount to very much; but I believe, Mr. Chairman, that to unify the money of South America and North America is absolutely impracticable, absolutely unnecessary, and absolutely impossible. Who would supply the means not only of changing the units of money, but even of changing the standard of money? To-day, with the exception of the United States, Cuba, Panama, and Venezuela, all the other countries are on a paper-money basis. Argentina has stopped gold payments, and Chile, Brazil, Ecuador, Peru, and Costa Rica are on a paper-money basis. What we want is to have them adopt a stable money, and I believe, if you want to do something practical, that this country should help those countries in adopting a means of stabilizing their money by some form of

loans under which the reserves of currency would be retained in this country.

The stimulus that the conversion of exchange gives to bankers is what I call the "dynamic force" of business. Were there no profit for the banks there would be no business, and the more changes and more conversions of money that the banks have to make the greater profit they make and the more is the trade of the country stimulated.

I heard Prof. Kemmerer say that the American dollar was in circulation in a few countries. With the exception of Cuba and Panama American gold dollars are not circulating anywhere. All the gold coins of all the countries are admitted in the other countries for their contents of gold. When I came to this country six years ago I brought with me some gold sovereigns. I could not buy a collar with a gold sovereign because I did not find a store around the vicinity where I was living that would accept the gold sovereign for any value at all. Now in Latin America the few people that have to do with foreign trade know the value of the gold dollar, of the pound, of the franc, and of the mark. And the conversion of different foreign moneys is in Latin America accomplished very easily. When I was 16 years old I was calculating invoices in dollars, in francs, in marks, and in pounds sterling, and all those in Latin America who are engaged in foreign trade are perfectly familiar with the principles of such exchange. So I repeat the words with which I began, that the adoption of a common unit is impossible, unnecessary, and inconvenient according to my opinion.

The Chairman. The discussion will close with remarks from Señor Pedro J. Cuadra, Ch., of Nicaragua, on the subject of "Monetary unification."

UNIFICACIÓN MONETARIA.

Por PEDRO J. CUADRA CH.,
Ex-Diputado de Nicaragua.

Se ha planteado ante este Congreso el problema de la unificación monetaria de las Américas. ¿Es posible llevar a cabo este ideal? Si nos atenemos a la historia de los esfuerzos efectuados en el decurso de los tiempos pasados, tendríamos que convenir en que ese fin es inasequible, porque todos los intentos han fracasado. ¿Por qué razón? No cabe duda que ese ideal, considerado en abstracto, es hermoso y aun parece de fácil realización; pero llevado a la práctica se ha visto tan lleno de dificultades que todos los esfuerzos se han estrellado hasta aquí.

Echemos una ojeada penetrante sobre la esencia de la moneda, para ver de determinar la razón de ese fracaso. Yo creo que la cuestión monetaria no está en la constitución de un pueblo, pues es cosa que se puede variar, y en efecto el sistema monetario en muchos países, ha cambiado radicalmente sin grandes trastornos. Naturalmente, este cambio no se puede hacer arbi-

trariamente, sino según leyes fijas cuyo estudio corresponde a la ciencia económica. Expondré algunas breves ideas sobre esta tesis.

La unificación monetaria no es necesaria desde el punto de vista de la ciencia; pero es posible cambiar el sistema monetario de los países, por muchas que sean las dificultades; por lo cual la unificación monetaria se puede buscar como un ideal de otra naturaleza.

Es bien sabido que la moneda tiene dos caracteres distintos. El uno es debido a su condición de artículo comerciable, sujeto por tanto a la ley de la oferta y la demanda. El segundo se lo da su función monetaria propiamente dicha. Es importante distinguir y precisar bien este último carácter, pues de su confusión se origina el error de pensar que la abundancia de numerario es lo mejor para un país, cuando la verdad es que cada uno exige sólo aquella cantidad necesaria para facilitar el intercambio de productos, dentro de su jurisdicción, ya que la complexidad del comercio imposibilita el simple trueque.

El oro y la plata, artículos de valor intrínseco comerciables, han prestado siempre ese servicio en el mundo, por sus inmejorables condiciones amonedables. Pero no es esencial en una sociedad bien constituida que la moneda tenga valor intrínseco; pues el crédito lo puede suplir, dando las mismas facilidades que ofrece el empleo de los metales preciosos como moneda. La existencia de los billetes de banco no tiene otra explicación. Sin tener valor intrínseco, desempeñan perfectamente la función monetaria. La fe pública en la honorabilidad del banco, le da ese carácter. Los gobiernos se han valido también de su crédito, para emitir billetes; y aunque los han emitido muchas veces sin respaldo, el público los recibe; porque con ellos puede pagar los impuestos que el Estado cobra, lo que hasta cierto punto suple el depósito.

Además el gobierno es el encargado de velar por el cumplimiento de las obligaciones individuales, lo cual le da la facultad de atribuir a su billete fuerza liberatoria; pues el individuo, para saldar sus deudas, no quiere oro ni plata, sino cualquier ficha o cosa por el estilo, que lo salve de castigo penal. Esto amplifica la esfera receptora del billete de gobierno. Pero esa esfera es limitada. Se puede decir por consiguiente de una manera general que existe cierto monto de transacciones internas en cada país, que requiere determinada cantidad de moneda para su fácil realización y una vez llena esa cantidad, sea por moneda metálica o fiduciaria, el sobrante es inútil. Determina ese monto el límite más allá del cual toda emisión de billete inconvertible es abuso perjudicial, que se marca con la depreciación. Con la moneda metálica no pasa esto, porque, teniendo valor intrínseco, entra en la categoría de riqueza exportable como cotizable en todos los mercados del mundo.

De lo expuesto se deduce que lo que un país necesita, desde el punto de vista monetario, es suficiente dinero para sus transacciones internas, no importando que su moneda sea de oro, de plata o de papel. De modo, pues, que para el comercio interno de una nación, la unidad monetaria adoptada es de poca monta. Esto constituye, por consiguiente, una de las dificultades para la unificación monetaria de los países, pues no se hace con gusto, si es difícil, lo que no obliga por imperioso mandato.

Pero el comercio de un país no es solo interno, sino también internacional. ¿Exigen estas relaciones comerciales la adopción de una misma unidad monetaria? El comercio es esencialmente trueque de productos. El internacional lo es naturalmente. Las importaciones se pagan con las exportaciones. La moneda que facilita ese trueque, podemos decir, es el giro o letra de cambio. Si hay más importaciones que exportaciones, aun cuando ambos países en que se efectúe ese comercio tengan una misma unidad monetaria, el tipo de cambio será alto

por la sencilla razón de que no hay bastantes productos afuera, o su equivalente en giros en el interior, para pagar las exportaciones. El caso contrario pasaría, si las exportaciones fuesen mayores que las importaciones. De aquí que tampoco sea necesaria para el comercio internacional, la unificacion monetaria; pues es más complicada la ciencia de los cambios internacionales, que la diferenciación de monedas, que se puede aprender fácilmente en cualquier monetario.

Lo que sí debe constituir la preocupación constante de los gobiernos, no es propiamente adoptar la unidad monetaria de tal o cual país (lo que puede hacer por motivos secundarios), sino tener una moneda de valor fijo y estable. Dadas las circunstancias del mundo en la actualidad, esto se logra únicamente por medio del patrón oro. No quiero decir que hay necesidad de acuñar monedas de oro; no. Un país con monedas de plata y aun con billetes inconvertibles, puede sentarse satisfactoriamente bajo esa sombra. Para lograrlo hay que tener presente la distinción del valor intrínseco de la moneda y su función monetaria. Esa función la determina la necesidad de dinero que tienen los negocios internos. Como la plata es un artículo abundante, para darle fijeza como moneda, hay que limitar su acuñación. De esa manera la moneda de plata tendría un valor estable; mientras que el metal plata no acuñada seguiría las fluctuaciones del mercado. Con la libertad de acuñación de la plata, confundidos en uno los dos caracteres de la moneda, esas fluctuaciones serían inevitables. Los mismos principios se siguen con el papel moneda, desde luego que ante el oro tan fiduciaria es el papel como la plata misma, si a ésta se le da en el sistema monetario un valor superior al que tiene. El toque de la cuestión está en restringir la acuñación o las emisiones a lo estrictamente necesario. Desgraciadamente para el segundo caso, es muy difícil que se detenga al borde de ese abismo el gobierno que probó una vez el uso del papel moneda inconvertible.

Nicaragua ha tenido muy interesante experiencia a este respecto. Hemos cambiado varias veces de sistema monetario y por consiguiente de unidad monetaria. Cuando la relación de la plata al oro era estable, teníamos el patrón de oro. El gobierno intervino malamente para evitar ciertas dificultades en el sistema y lo que hizo fué destruirlo. Por medio de un decreto, valoró la libra esterlina en cinco pesos moneda corriente, de plata, para que estos tuviesen la fuerza liberatoria legal de aquella. Como poco después bajó la plata, en virtud del decreto gubernativo, la mala moneda arrojó a la buena fuera del país y quedamos en pleno régimen de patrón de plata. Así cambiamos por primera vez de sistema monetario, o mejor dicho, de unidad monetaria efectiva. Sin esa intervención oficial, nuestro sistema hubiera sido de oro. Posteriormente, impelidos otros gobiernos por la necesidad de recursos, hicieron grandes emisiones de billetes, traspasándose el límite justo. Nuestra antigua unidad monetaria de plata dejó de existir, para dar lugar con el sistema de papel moneda a otra demeritada y fluctuante. Llegó a valer el peso billete hasta cinco centavos oro. El peso billete, tuviese cualquier valor efectivo, era la unidad monetaria para el pueblo y para todo el mundo, menos para los prestamistas y ciertos hombres de negocios, que se defendían de las fluctuaciones contando solo en oro americano. Teníamos un caos monetario. En estas circunstancias emprendió el gobierno actual la reforma necesaria y aconsejándose de los expertos financieros, los señores Conant y Harrison, implantó el patrón de oro en la república, dejando el billete, pero cambiando la unidad monetaria con la adopción del dólar americano, al que llamó *Córdoba* por el nombre del Conquistador español que llevó la civilización a Nicaragua.

No hay que disimular las múltiples dificultades por que hemos pasado para completar esta reforma. Hace ya más de dos años que vivimos bajo el nuevo

régimen; pero el gobierno se vió en la necesidad de prorrogar la época del retiro total del billete nacional hasta el último de octubre de 1915, día en que la conversión quedó consumada. Las resistencias al sistema han venido de todas partes y han revestido todos los caracteres imaginables. Uno de los grandes daños que produce el sistema de papel moneda es el de hacer ilusorios los salarios de los trabajadores a jornal. Por ejemplo, nuestro jornalero ordinario ganaba por lo regular dos pesos billetes nacionales, suma imaginada suficiente. Como la conversión se hizo a 8 centavos el peso, el valor real y efectivo del jornal se descubrió ser 16 centavos oro apenas, cantidad a todas luces insuficiente. Naturalmente, con la conversión el jornal tendrá que subir, pero eso es un inmenso bien; aunque a él es debido mucha parte de las resistencias hechas al nuevo sistema. Más aun, el pueblo trabajador mismo, con todo y que lo favorece el nuevo sistema, si no de una manera inmediata, al menos para un futuro no lejano, no lo ha saludado con el entusiasmo que debiera; pues se asusta de ver tan exigua su ganancia, cuando en realidad es la misma que la anterior, aunque expresada en diferentes unidades. El gobierno no obstante esas dificultades, consciente del beneficio que estaba impartiendo, se ha mantenido firme al pie de su bandera de reforma monetaria que está ya operando con entera satisfacción. El cambio de unidad ha sido además una educación intelectual para nuestro pueblo; porque es notorio que si se le da gusto, dejándolo con la antigua unidad monetaria, las cosas hubieran sido más fáciles indudablemente, pero se le habría quitado la ocasión de detenerse a pensar, a calcular, a comparar, a que se ha visto obligado por el cambio de moneda efectuado. Y ¿quien duda que un pueblo así ejercitado, no es más apto después del ejercicio que antes? Por este lado, pues, se puede decir que el cambio de moneda, necesario desde el punto de vista de la ciencia por lo caótico de nuestro sistema, se convirtió en causa de cultura, por haber adoptado nueva unidad monetaria.

Nuestro sistema monetario está constituido de esta manera. Un Banco Nacional tiene el privilegio exclusivo de emitir billetes. El gobierno tiene prohibido efectuar nuevas emisiones. El antiguo billete nacional se cambió por los billetes de banco, a razón de ocho centavos el peso, que era el de la plaza. La cantidad de billetes así lanzada a la circulación fué la que se consideró necesaria para el comercio interior. A ese monto de billetes de banco no se le puede agregar un peso más, si no es respaldado por otro peso en oro; de manera que la circulación está restringida a la absolutamente necesaria. Además se estableció un fondo de conversión en Nueva York, para que se mantuviera a la par constantemente el córdoba. Este fondo varía mucho, y sus condiciones dependen del estado de la riqueza pública, o digamos mejor de la balanza comercial. Con motivo de la guerra europea, el Banco cerró la venta de giros y el cambio entonces subió sobre el 20%. Era muy natural: nuestro comercio internacional ha sido exiguo y en ese tiempo teníamos una balanza comercial en contra y es bien sabido que de la balanza comercial depende, en países de patrón de oro, el valor de los giros. En los de plata y de billete inconvertible, además de esa causa mínima, se encuentra la fluctuación del valor de la plata y la pletórica abundancia del papel, como los verdaderos determinantes del tipo de cambio. El gobierno tomó todas las medidas del caso, cortó los gastos públicos y como hemos tenido paz y economía general, ha habido indudable mejora económica. El córdoba la ha revelado. No se ha abierto aun la venta oficial de giros y sin embargo, nuestra unidad monetaria ha vuelto a ponerse a la par del dólar americano, por la corriente natural de los negocios. Hoy en día ambas monedas corren indistintamente en nuestras plazas de negocios.

El hilo de mi discurso me trae a creer, por lo tanto, que lo que este Congreso debe recomendar, como esencial para el bienestar económico de los países, es la adopción del patrón de oro; y como medida secundaria, porque es posible, aunque difícil, la adopción del dolar americano, como unidad monetaria de las Américas. Este segundo punto, sin embargo, no se puede recomendar como una medida científica, porque no tiene ese carácter, como hemos visto, sino tan sólo como emblema de panamericanismo. No es posible dudar que sería grato para todos poder decir al mundo: Las Américas han realizado el ideal de la unificación monetaria. La República Dominicana, Panamá, y Cuba lo han adoptado; Nicaragua lo tiene también, a pesar de las dificultades; ¿por qué no todos?

The following papers were presented and read by title at this session:

Relaciones comerciales de El Salvador y los Estados de America, by Pedro S. Fonseca.

A common monetary unit for America, by Guillermo Subercaseaux.

RELACIONES COMERCIALES DE EL SALVADOR Y LOS ESTADOS UNIDOS.

Por PEDRO S. FONSECA,
Director General de Estadística de El Salvador.

El presente escrito, es una contribución al estudio de las relaciones comerciales entre El Salvador y los Estados Unidos de América. El conocimiento recíproco de los pueblos, es el mejor medio que se puede seguir para cimentar más íntimas relaciones internacionales.

La investigación histórica del tema con datos salvadoreños es difícil, por haberse destruído preciosos documentos en el incendio del Palacio Nacional [noviembre de 1889]. Imperfectamente he podido reconstruír los antecedentes, consultando documentos oficiales y datos de personas autorizadas.

De los territorios que constituyeron la Capitanía General de Guatemala, dependiente de España hasta 1821, el menos favorecido por su posición hidrográfica, fué el que hoy constituye le República de El Salvador. En efecto: tiene salida directa sólo hacia un océano; ninguno de sus ríos es navegable por buques de moderado tonelaje; finalmente para ir al Este de los Estados Unidos y Europa, por camino corto, hay que atravesar otros territorios.

Cuando las condiciones geográficas son favorables, el menor esfuerzo conduce a máximos resultados en el orden comercial. Y debemos señalar con satisfacción a todo el mundo el hecho de que nuestro desenvolvimiento económico constituye el éxito feliz de la lucha entre el trabajo y la Naturaleza. La potencialidad demográfica, el espíritu vivo, fuerte, repleto de aspiraciones de engrandecimiento pacífico del pueblo salvadoreño, han sido el alma del incremento de producción y consumo reproductivo, y por ende del comercio que es su función más inmediata.

El origen de la producción salvadoreña radica en el suelo y subsuelo. Oro hay en las entrañas de su territorio, como en las cúspides de las montañas cultivadas de cafetos. En esta tierra, estrechada por brazos hermanos, vive un pueblo relativamente feliz, porque está consagrado al trabajo.

El incremento de la población, se debe en gran parte a origen fisiológico. Se puede prever que dentro de cuarenta años se habrá duplicado la población

actual [1,254,000 h.]. El aumento del comercio exterior en los últimos diez años, ha sido casi tres veces mayor que el de la población; de donde se infiere, que se ha llegado más allá de las necesidades primeras, pues la sobreproducción se ha enviado al extranjero para adquirir lo que no nos es posible producir por el clima y la incipiencia de la industria. El consumo extranjero no ha guardado paralelismo con el incremento de la población y es que ha habido anticipo de fuerzas reproductoras que siempre necesita un país joven.

Por decreto de 30 de mayo de 1838, El Salvador se separó de la Federación Centroamericana, y asumió desde entonces la soberanía inmanente y transeunte. Ha sido tradicional en su política aduanera, el mantenimiento del principio de general concurrencia. Jamás ha sostenido guerra aduanera como acto de hostilidad contra ninguna nación. Por causas de orden interno ha mantenido un sistema fiscal o algo así como un proteccionismo empírico e imperfecto, sin infringir por eso, los principios del derecho internacional. La tarifa salvadoreña no ha sido diferencial, y si bien es cierto que El Salvador celebró tratados comerciales con Bélgica [5 de febrero de 1858], Francia [21 de octubre de 1858], Italia [24 de junio de 1860], Gran Bretaña [24 de octubre de 1862], España [24 de junio de 1865], Alemania [3 de junio de 1870], han caducado por motivos diferentes, persistiendo entre los tratados antiguos, el de Italia.

La evolución proteccionista de Europa, iniciada por Francia en 1891–1892, puso al frente de nosotros, una grave cuestión: la tarifa diferencial para el café, en el mercado por entonces preferido. Las hábiles y patrióticas gestiones del Ministro de El Salvador, doctor Rafael Zaldívar, tuvieron feliz éxito con la firma de la Convención denominada Zaldívar-Delcasée, firmada en Paris el 9 de enero de 1901, pero puesta en vigor desde el 15 de enero de 1902, en virtud de la cual, el café salvadoreño fué admitido en calidad de reciprocidad, conforme a la tarifa mínima. Posteriormente Bélgica, [21 de marzo de 1906] y Alemania [14 de abril de 1908] se adhirieron a aquel convenio estipulando en un Tratado Público, el tratamiento de la nación más favorecida.

Estados Unidos ha manifestado deseos de obtener el mismo tratamiento; mas, como no existe tratado en que recíprocamente se conceda esta cláusula, El Salvador ha contestado cortesmente, que es necesario dicho requisito.

Diversos acontecimientos han contribuído a estrechar las relaciones comerciales entre El Salvador y Estados Unidos. Estos hechos forman verdaderas etapas, aunque de influencia más general. En primer lugar debemos mencionar el hallazgo de oro en California [1848]; después, la apertura del ferrocarril de Colón a Panamá [1858] y la del de Tehuantepec, en conexión con el servicio de vapores de la "Salvador Railway Co. Ltd."

El canal de Panamá y la proyectada línea de Santa Ana [El Salvador] a Zacapa [Guatemala], nos acercará tanto como es posible a Estados Unidos.

Atendiendo a los medios disponibles y a las circunstancias adversas para la vida, el ferrocarril de Colón a Panamá, fué una obra que levantó muy alto el genio constructor norteamericano. Los sacrificios de aquellos héroes del trabajo se convirtieron en inmensos beneficios para los países bañados por el mar de Balboa.

De menor sacrificio, pero no por eso de inferior importancia comercial, debemos considerar el ferrocarril de Tehuantepec. El Istmo mexicano se encuentra felizmente en el eje comercial del mundo, y tal circunstancia añadida al buen servicio, antes de la situación crítica mexicana y europea, la aprovechó favorablemente el comercio salvadoreño.

Para juzgar de las ventajas de la vía de Tehuantepec sobre la de Panamá, respecto a la distancia [de Nueva York y Nueva Orleans a Acajutla, respectivamente] véase el siguiente cuadro comparativo:

	Millas.
De Nueva York a Acajutla:	
Por Panamá	3, 333
Por Tehuantepec	2, 793
Diferencia a favor de Tehuantepec	540
De Nueva Orleans a Acajutla:	
Por Panamá	2, 631
Por Tehuantepec	1, 521
Diferencia a favor de Tehuantepec	1, 110

En circunstancias normales, llevará la ventaja la vía más rápida y cuya tarifa de fletes y pasajes sea más barata.

Los productos exportables de El Salvador en la época, son: café, minerales [oro y plata], añil [índigo], bálsamo, pieles, azúcar, arroz y tabaco. Se cultivó y exportó algodón, en el período de 1865 a 1870.

El añil salvadoreño, no obstante su impureza debido al empirismo de la elaboración, ha sido muy apreciado por el tono azul vivo y firme que da a los tejidos. Durante le dominación española y aun después, fué un artículo principalísimo de exportación, lo que dió un alto grado de prosperidad a las regiones añileras. Según el análisis que el químico Sr. Platts, hizo en 1882, contenía el 55% de indigotina.

Antes de 1864, no hay datos de estadística comercial, pues hasta ese año se principió a organizarla. En el período de 1876 a 1878, mejoró este servicio bajo la dirección del señor don José C. López, de grata memoria. Sin embargo, es de sentirse que se observen lagunas en algunas administraciones posteriores, probablemente a causa de que si bien se recogieron los datos, no se publicaron. En 1872, culminó la exportación de ese artículo pues se elevó a la suma de $2.786,577 plata que en aquella fecha estaba casi a la par del oro. Su mínima se verificó en 1892 bajando a $151,170. De entonces acá ha ocupado entre el tercero y cuarto orden en cuanto a la exportación.

Muchas circunstancias contribuyeron a la depresión de esta industria, a saber: las actividades agrícolas se enderezaron hacia el café; la ley de extinción de egidos [1882]; el triunfo de la técnica alemana al llegar a preparar un producto sintético de las mismas condiciones colorantes del añil. Bayer, desde 1865 trabajó en tal sentido y no fué sino hasta 1897 que la Badische Anilin and Soda Fabrik, lanzó un producto comercial que vino a sustituir al añil en gran parte. La técnica alemana influyó como causa concomitante desalentadora para dicha industria. Por motivo de la guerra europea, ha vuelto el añil a recobrar interés como artículo exportable. El añil, en el período de su prosperidad, fue el mantenedor del intercambio con la Gran Bretaña.

He aquí un cuadro que expresa el porcentaje del añil exportado a Estados Unidos en la última década:

	%		%
1905	0, 4	1910	0, 4
1906	----	1911	----
1907	----	1912	----
1908	0, 7	1913	----
1909	15, 0	1914	21, 0

Se ha discutido mucho sobre quién fue el primero que introdujo el café en El Salvador. Aunque no hubiere sido el primero, es un hecho que Antonio J. Coelho, educador originario del Brasil, plantó en una finca cerca de San Salvador, en 1840, algunos árboles de café; y que, hasta en 1855, se encuentran huellas en documentos oficiales de haberse exportado 19 quintales [?] por Acajutla y La Libertad.

La exportación de café desde 1864, ha ido en progresión creciente, salvo algunos años, por influencia de crisis en los países de mayor producción o por malas cosechas locales.

Las siguientes cifras indican el monto anual de la exportación de este artículo:

	Valor en plata.		Valor en plata.
1864	$80, 605	1887	$2. 780, 234
1865	138, 263	1888	4. 589, 197
1866	197, 077	1889	3. 545, 764
1867	275, 220	1890	4. 268, 743
1868	528, 123	1891	4. 806, 229
1869	507, 793	1892	5. 526, 757
1870	663, 348	1893	5. 405, 222
1871	662, 421	1894	5. 035, 363
1872	489, 300	1901	8. 308, 757
1873	1. 056, 330	1902	7. 670, 373
1874	1. 342, 952	1903	10. 388, 910
1875	1. 073, 158	1904	13. 470, 798
1876	1. 209, 362	1905	10. 916, 275
1877	1. 686, 444	1906	11. 673, 900
1878	1. 179, 334	1907	10. 835, 173
1879	2. 001, 163	1908	10. 365, 042
1880	1. 723, 465	1909	12. 241, 881
1881	2. 909, 196	1910	12. 821, 902
1882	2. 700, 804	1911	16. 166, 144
1883	2. 416, 104	1912	17. 450, 077
1884	2. 200, 106	1913	18. 738, 036
1885	2. 010, 436	1914	22. 544, 251
1886	2. 668, 454		

El café de El Salvador, ha tenido siempre un excelente mercado en San Francisco, California. El período de mayor animación fué de 1886 a 1894, llegando en 1892, a comprar los Estados Unidos hasta el 60% de nuestro café. La cantidad relativa de café salvadoreño comprada por Estados Unidos desde 1901 a 1914, fué así:

	Por ciento.		Por ciento.
1901	20	1908	19
1902	15	1909	17
1903	18	1910	22
1904	17	1911	22
1905	17	1912	20
1906	22	1913	17
1907	21	1914	14

Sin embargo de haber llegado a ser Estados Unidos el primer país consumidor de café por cabeza, en el mundo, y al favorable tratamiento del mismo artículo por parte del Gobierno de aquella nación, como se prueba con la proclama de S. E. el señor Presidente de Estados Unidos, de 28 de marzo de 1910, y la tarifa sancionada de 3 de octubre de 1913, la corriente de exportación no se ha en-

cauzado únicamente hacia los Estados Unidos, porque existen muchas y ricas casas francesas en El Salvador, y porque entraron nuevos factores comerciales como Alemania, Italia y países escandinavos.

Trataremos hoy de los productos del subsuelo. Debemos declarar que es necesario formar un mapa geológico de El Salvador, en provecho general y de los capitales extranjeros que podrían venir a trabajar en la explotación honrada de nuestros recursos naturales.

Los productos mineros que se benefician son: plata y oro en barras o brozas, algo de plomo y zinc; y su destino es Estados Unidos y la Gran Bretaña.

Agregaremos otros productos exportados a Estados Unidos como pieles, caucho y henequén, los cuales en 1914 tuvieron esta proporción: pieles, 40%; henequén, 51%; y caucho, 42%.

He aquí las cifras absolutas de exportación de minerales y la relativa correspondiente a Estados Unidos en la última década:

Año.	Total.	Correspond a EE. UU.	Año.	Total.	Corresponde a EE. UU.
	Plata.	*Por ciento.*		*Plata.*	*Por ciento.*
1905	$1.962,694	44	1910	$3 145,355	90
1906	3,376,495	78	1911	3.814,994	92
1907	3.058,913	89	1912	3.355,926	92
1908	3.285.560	90	1913	3.726,725	87
1909	2.976,730	90	1914	3.410,522	95

He aquí la parte proporcional que a Estados Unidos le correspondió en nuestra exportación total, en la última década:

	Por ciento.		Por ciento.
1905	21.7	1911	34.8
1906	35.5	1912	27.9
1907	34.0	1913	28.4
1908	33.1	1914	24.7
1909	29.7		
1910	31.7	Media	30.15

¿Qué compramos a los Estados Unidos?

Nuestra industria fabril, si se exceptúan las de calzado, muebles, tipografía, tabacos y otras, está por desarrollarse. Entre los articulos alimenticios, importamos grandes cantidades de harina, no obstante de poseer terrenos apropiados. No hay para qué decir que compramos en el extranjero maquinarias, tejidos, fantasías, etc.

La Gran Bretaña estuvo rivalizando con Estados Unidos en el primer puesto del país importador. Véase el cuadro comparativo siguiente, en la década tantas veces mencionada.

Años.	Gran Bretaña	Estados Unidos.	Años.	Gran Bretaña.	Estados Unidos.
	Por ct.	*Por ct.*		*Por ct.*	*Por ct.*
1905	30.23	31.17	1911	30.53	35.73
1906	33.90	30.96	1912	28.10	38.80
1907	28.53	35.56	1913	27.42	39.40
1908	35.28	30.35	1914	25.87	40.90
1909	34.59	32.26			
1910	30.76	31.41	Media	30.62	38.25

Desde 1907 principió a dominar EE. UU. en nuestra importación, hecho que coincide con el tráfico formal en el ferrocarril de Tehuantepec, en conexión con la línea de vapores de la "Salvador Railway Co. Ltd."

En la harina no tiene competidor Estados Unidos. He aquí lo que hemos comprado:

	Dólares.		Dólares.
1905	261, 195	1911	263, 236
1906	224, 818	1912	392, 863
1907	213, 278	1913	325, 220
1908	210, 682	1914	319, 051
1909	360, 502		
1910	247, 165	Total	2, 823, 960

Nuestras comunicaciones marítimas, directas o indirectas son mantenidas por la Pacific Mail S. S. Co., que hace el servicio de San Francisco Cal., a Balboa, haciendo escalas en puertos de México y Centro América; por los vapores de la Salvador Railway Co. Ltd., que hacen hoy el servicio entre Salina Cruz y Balboa, tocando en puertos centroamericanos [antes de la guerra estaba en conexión sólo con la ruta de Tehuantepec]; por la Merchants Line North Pacific Service cuyos vapores corren de San Francisco a Sur América, haciendo escala en Acajutla y Balboa; y finalmente, por los vapores de la Atlantic and Pacific Steamship Co. que corren de San Francisco a Nueva York y viceversa, vía canal de Panamá, tocando en cada viaje en Acajutla.

Hay algunos obstáculos para la perfecta comunicación marítima con los Estados Unidos, que es preciso referirlos. La ley americana exime de ciertos derechos de puerto que son considerables, como pilotaje, faros, etc., a los buques que hacen el servicio de cabotaje; desde luego si un buque parte de San Francisco para Nueva York, vía canal de Panamá, se considerará como cabotaje, *siempre que no toque en puerto extranjero*. Mientras que esté vigente esta última circunstancia, no obtendremos todas las ventajas deseables del Canal para viajes marítimos periódicos, porque no siempre hay carga en exceso que pueda compensar los altos derechos de peaje. Los mismos vapores de la Pacific Mail, por otra ley americana, no pueden atravesar el canal, porque sus accionistas son también accionistas de ferrocarriles que pueden hacer la competencia al canal de Panamá.

Los únicos vapores que partiendo de puertos de El Salvador, cruzan en cada viaje el canal, son los de la Salvador Railway Co. Ltd.; pero son dos y pequeños, y no pueden atender sino una pequeña parte de la exportación e importación.

Desde noviembre, el ferrocarril de Colón a Panamá, sólo transporta carga local. En vapores de la Administración del Canal se transporta la carga de Cristóbal a Balboa y viceversa; pero no con la prontitud deseable, pues ha ocurrido el caso que nuestro café esté más de dos meses en las bodegas de Balboa. Prácticamente el servicio de transporte por Panamá, es hoy menos favorable al comercio, que antes de abrirse el canal.

Tendremos que esperar algún tiempo, para gozar de las ventajas del servicio de vapores que hacen las compañías europeas y americanas en el Atlántico, vía Canal de Panamá, a menos que la administración americana, consultando los mutuos intereses del comercio, quiera remover las dificultades indicadas, reduciendo también, si es posible, los derechos de peaje, para que la obra genial del istmo, sea un verdadero vínculo de los intereses económicos de América. Conozco personalmente el Canal y su servicio, pues hice un viaje especial de instrucción; además obtuve datos de competentes hombres de negocios, para hacer estas afirmaciones.

El admirable adelanto intelectual, político y administrativo e industrial de los Estados Unidos, tiene y tendrá gran influencia atractiva en los negocios de la América Latina. ¿Qué producto industrial europeo no se obtiene en los Estados Unidos? Por dicho motivo vemos que en los últimos diez años hemos comprado una cantidad de tejidos, maquinaria, petróleo, artículos de alimentación y hasta artículos de lujo en los Estados Unidos, como puede verse en los cuadros finales, suficientemente detallados.

Ciertamente, el monto del comercio de El Salvador, respecto a Estados Unidos, es muy pequeño comparándolo con el total de los países de la América Latina. En 1913 el total del comercio exterior de los Estados Unidos con los países de la América Latina fue de 2,864,518,151 dólares, en cuya enorme cantidad apenas tuvo El Salvador, 0.17% de participación. En este grado tan modesto, que corresponde al territorio y población de El Salvador, nunca es despreciable la corriente comercial, no obstante que la nación adonde se dirija sea poderosa y rica.

Nuestra producción y consumo extranjero aumentarán cada año e iremos muy lejos si continúan la paz y el orden que felizmente disfrutamos.

COMERCIO EXTERIOR DE EL SALVADOR CON ESTADOS UNIDOS.

Resumen.

Años.	Importación.	Exportación.	Años.	Importación.	Exportación.
	Dólares.	*Pesos plata.*		*Dólares.*	*Pesos plata.*
1905	1,354,646.50	3,062,603.27	1910	1,346,597.13	5,699,171.47
1906	1,289,728.50	5,725,615.06	1911	1,815,051.13	6,882,149.43
1907	1,197,395.06	5,046,147.19	1912	2,627,700.22	6,642,234.37
1908	1,287,452.32	5,115,994.41	1913	2,406,888.44	6,691,590.03
1909	1,344,315.79	5,011,876.98	1914	2,027,731.84	6,655,420.52

Importación de Estados Unidos en 1905–1914.

Artículos.	Peso en kilos.	Valor en dólares.
Abonos	98	5.00
Aguas minerales	1,466	163.45
Algodón en hilo	1,975	1,384.12
Algodón en tejidos	904,802	433,166.72
Artículos diversos	527,683	97,095.02
Artículos libres	2,595,239	139,659.57
Cal y cemento	73,155	957.90
Calzado y artículos de zapatería	45,669	47,942.96
Cáñamo en toda forma	537	187.41
Cerveza y ginger ale	202,379	13,680.47
Comestibles	221,242	25,292.95
Cristalería	20,325	2,080.38
Cueros en artefactos	183	116.00
Drogas y medicinas	194,203	59,247.26
Especias y té	10,262	3,060.03
Ferretería	472,648	60,265.28
Fósforos	[illegible]	6.93
Harina	6,212,145	261,185.36
Joyería	45	146.30
Lana en tejidos	281	422.22
Libros impresos	629	447.38
Licores	44,084	12,696.95
Lino en hilo	12	5.46
Lino en tejidos	26	21.26
Loza y porcelana	1,464	314.17
Madera y corchos	1,008,411	8,841.51
Maíz	284,215	8,956.98
Maquinaria	405,409	80,992.40
Material jabón y candelas	140,449	9,021.56
Mercería	6,012	2,072.16
Moneda	1	665.00
Muebles	11,217	4,763.58

Artículos.	Peso en kilos.	Valor en dólares.
Papel y artículos de escritorio	7,963	12,118.90
Petróleo y aceite para alumbrado	527,284	40,628.02
Perfumería	6,288	2,990.92
Plantas y semillas	1,871	350.68
Quesos y mantequilla	942	330.13
Sacos para café	23,390	3,035.80
Seda en hilo	141	1,265.00
Seda en tejidos	63	639.60
Sombreros varias clases	470	783.00
Tabaco	61	104.73
Velas esteáricas	271	57.50
Vinos	173,876	16,898.43
	14,128,952	1,354,646.50
1906.		
Aguas minerales	562	[illegible]
Algodón en hilo	444	2,285.91
Algodón en tejidos	816,416	409,072.97
Artículos diversos	568,640	113,866.93
Artículos libres	1,657,194	137,798.00
Cacao	19	9.00
Cal y cemento	66,467	3,079.71
Calzado y artículos de zapatería	34,192	42,251.45
Cáñamo en toda forma	893	419.73
Cerveza y ginger ale	212,141	13,977.04
Comestibles	173,352	25,778.60
Cristalería	13,131	2,827.43
Cueros en artefactos	414	541.44
Drogas y medicinas	270,061	95,116.33
Especias y té	6,135	1,748.39
Ferretería	380,262	71,303.04
Fósforos	1,392	526.00
Harina	5,720,719	224,818.10
Joyería	47	278.74
Lana en tejidos	19	260.00
Libros impresos	1,729	1,023.50
Licores	45,240	13,588.91
Lino en tejidos	69	66.78
Loza y porcelana	33,839	990.36
Madera en cortes	339,399	6,122.02
Maíz	20,158	628.32
Maquinaria	224,952	48,538.79
Mármol	866	8.25
Material para jabón y candelas	85,810	6,761.99
Mercería	2,840	1,485.98
Moneda	5	2,620.00
Muebles y obras de ebanistería	8,663	2,965.43
Papel y artículos de escritorio	7,065	3,045.99
Petróleo y aceite para alumbrado	651,920	27,185.27
Perfumería	6,948	2,811.82
Plantas y semillas	112	50.00
Quesos y mantequilla	657	256.16
Sacos para café	6,648	890.50
Seda en hilo	477	3,943.20
Seda en tejidos	284	3,464.88
Sombreros de varias clases	936	1,338.87
Tabaco	45	175.00
Velas esteáricas	6,510	1,160.00
Vinos	149,058	14,574.42
	11,520,701	1,289,728.50
1907.		
Aguas minerales	729	17.25
Algodón en hilo	5,553	2,500.03
Algodón en tejidos	683,947	329,160.61
Animales vivos	1,380	750.00
Artículos de fantasía	82	30.00
Artículos diversos	355,411	83,708.37
Artículos libres	1,570,040	169,746.04
Cacao	37	19.00
Cal y cemento	63,162	1,816.21
Calzado y artículos de zapatería	58,067	76,552.00
Cáñamo en todas formas	7,907	784.86
Cerveza y ginger ale	99,317	6,519.54
Comestibles	190,714	25,539.56
Cristalería	19,757	4,026.25
Cueros en artefactos	291	261.00
Drogas y medicinas	212,850	86,525.64
Especias y té	9,097	2,858.91
Ferretería	390,965	66,488.32

Artículos.	Peso en kilos.	Valor en dólares.
1907.		
Fósforos	840	514.47
Harina	5,199,283	213,878.17
Lana en tejidos	1,632	1,697.70
Libros impresos	868	594.76
Licores	44,148	13,562.37
Loza y porcelana	7,287	3,014.45
Madera y corchos	445,568	8,205.43
Maíz	8,338	205.45
Maquinaria	79,550	27,890.82
Material para jabón y candelas	134,236	10,453.98
Mercería	3,869	2,258.84
Moneda	3	975.00
Muebles	10,447	4,646.64
Papel y artículos de escritorio	6,454	3,125.42
Petróleo y aceite para alumbrado	536,131	22,352.57
Perfumería	4,512	5,286.22
Plantas y semillas	1,243	57.00
Quesos y mantequilla	1,797	940.51
Sacos para café	15,553	2,828.76
Seda en tejidos	126	1,946.92
Sombreros varias clases	276	780.25
Tabaco	241	865.79
Vinos	157,454	19,978.25
	10,340,165	1,197,395.06
1908.		
Aguas minerales	796	88.41
Algodón en hilo	7,997	5,685.26
Algodón en tejidos	890,119	451,692.72
Animales vivos	190	60.00
Artículos diversos	318,581	73,886.53
Artículos libres	1,720,248	172,962.92
Cal y cemento	103,351	1,396.50
Calzado y artículos de zapatería	71,639	85,836.63
Cáñamo en toda forma	701	212.82
Cerveza y ginger ale	96,655	5,896.33
Comestibles	162,901	24,666.80
Cristalería	10,965	3,739.45
Cueros en artefactos	357	615.96
Drogas y medicinas	150,896	74,709.10
Especias y té	9,405	3,193.77
Ferretería	456,286	66,223.45
Harina	4,914,923	210,632.88
Joyería	210	251.30
Lana en tejidos	3,557	3,081.53
Libros impresos	653	351.50
Licores	34,062	8,755.73
Lino	557	181.37
Loza y porcelana	401	306.98
Madera y corchos	8,112	796.18
Maquinaria	90,929	30,849.83
Material de jabón y candelas	74,406	6,116.59
Mercería	3,322	2,571.96
Muebles y obras de ebanistería	8,187	3,676.68
Papel y artículos de escritorio	11,616	3,437.90
Petróleo y aceite de alumbrado	427,877	17,680.90
Perfumería	4,739	1,834.00
Quesos y mantequilla	1,666	525.98
Sacos para café	19,504	2,762.56
Seda en tejidos	651	1,580.10
Velas esteáricas	2,761	377.10
Sombreros de otras clases	792	2,120.27
Tabaco labrado	315	167.20
Vinos	155,938	18,527.04
	9,765,056	1,287,452.32
1909.		
Abonos	29,251	2,225.00
Aguas minerales	570	45.00
Algodón en hilo	3,214	1,455.69
Algodón, tejidos y manufacturado	811,394	366,221.65
Animales vivos		190.00
Artículos de fantasía	3,909	251.25
Artículos diversos	337,486	82,503.09
Artículos libres	2,449,779	197,421.47
Cacao	22	3.50
Cal y cemento	45,588	929.00
Calzado y artículos de zapatería	66,929	95,555.60
Cáñamo en toda forma	99	10.00
Cerveza y ginger ale	68,627	1,880.99

Artículos.	Peso en kilos.	Valor en dólares.
1909.		
Comestibles	175,484	29,094.44
Cristalería	13,801	3,779.87
Cueros en artefactos	407	1,369.41
Drogas y medicinas	220,111	87,989.11
Especias y té	6,441	1,538.01
Ferretería	467,960	[illegible]
Harina	5,561,979	360,501.97
Joyería	264	132.71
Lana en tejidos y manufacturada	426	599.25
Libros impresos	2,083	1,019.58
Licores	14,225	4,659.70
Lino en tejidos y manufacturado	94	[illegible]
Loza y porcelana	2,333	538.38
Madera y corchos	22,125	368.60
Maíz	37,400	1,602.98
Maquinaria	156,486	46,798.73
Mármol	4,705	1,440.00
Material para jabón y candelas	70,956	3,135.43
Mercería	2,619	2,520.07
Moneda	2,800	38,030.00
Muebles y obras de ebanistería	23,357	7,124.62
Papel y artículos de escritorio	7,102	2,638.70
Petróleo y aceite para alumbrado	623,592	23,635.66
Perfumería	4,821	1,952.45
Quesos y mantequilla	2,323	815.80
Sacos para café	9,485	1,307.00
Seda en tejidos y manufacturada	160	150.00
Sombreros de varias clases	533	1,255.51
Tabaco elaborado	24	5.40
Tabaco en rama	179	[illegible]
Vinos	123,123	14,941.27
	11,421,908	1,344,315.79
1910.		
Abonos	192,913	7,640.00
Aguas minerales	2,013	163.10
Alambre para cercas	409,978	21,530.62
Algodón en hilo	5,247	3,485.09
Algodón en tejidos	560,663	295,211.10
Animales vivos	20	90.00
Artículos de fantasía	773	225.75
Artículos diversos	534,241	91,224.74
Artículos libres	3,765,563	216,572.34
Cal y cemento	175,835	1,651.50
Calzado y artículos de zapatería	83,387	138,356.77
Cáñamo en toda forma	3,429	499.09
Cerveza y ginger ale	49,669	3,270.76
Comestibles	170,629	24,154.00
Cristalería	26,035	4,628.72
Cueros en artefactos	541	564.64
Drogas y medicinas	219,480	81,067.21
Especias y té	6,692	1,303.31
Ferretería	798,770	91,747.27
Harina	5,483,673	247,164.99
Joyería	1,694	1,109.32
Lana en tejidos	1,052	1,280.02
Libros impresos	1,740	1,179.64
Licores	21,973	6,410.90
Loza y porcelana	464	468.25
Madera y corchos	28,168	903.20
Maquinaria	193,747	47,414.96
Maquinaria agrícola	48,423	2,894.94
Mármol	800	113.40
Material para jabón y candelas	39,847	2,616.65
Mercería	3,233	2,216.65
Muebles y obras de ebanistería	11,508	5,003.64
Papel y artículos de escritorio	9,070	5,607.63
Petróleo y aceite para alumbrado	484,411	14,601.36
Perfumería	3,547	1,608.71
Plantas y semillas	1,542	261.00
Quesos y mantequilla	2,423	901.24
Sacos para café	4,247	511.34
Seda en hilo	37	65.13
Seda en tejidos	85	594.29
Sombreros varias clases	244	908.52
Tabaco en toda forma	283	225.10
Vinos	88,546	9,049.43
	13,256,336	1,346,597.13

Artículos.	Peso en kilos.	Valor en dólares.
1911.		
Abonos	332,701	14,723.67
Aguas minerales	155	10.00
Alambre para cercas	691,098	35,369.37
Algodón en hilo	17,818	10,292.54
Algodón en tejidos	1,060,151	556,401.79
Animales vivos	1,004	746.00
Artículos de fantasía	204	84.08
Artículos diversos	513,437	158,788.48
Artículos libres	1,731,724	155,015.38
Cacao	32	4.13
Cal y cemento	80,041	10,025.95
Calzado y artículos de zapatería	108,656	177,736.64
Cáñamo en toda forma	558	228.58
Cerveza y ginger ale	38,434	2,699.45
Comestibles	187,358	30,770.53
Cristalería	23,920	7,463.09
Cueros en artefactos	282	942.59
1912.		
Abonos	1,874,001	80,856.34
Aguas minerales	233	24.00
Alambre para cercas	1,317,511	61,068.62
Algodón en hilo	19,882	7,279.92
Algodón en tejidos y manufacturado	1,131,210	628,758.28
Animales vivos	1,054	1,862.75
Artículos de fantasía	240	59.00
Artículos diversos	1,021,921	238,191.26
Artículos libres	1,789,529	234,407.16
Cacao	44	17.92
Cal y cemento	617,805	8,080.53
Calzado y artículos de zapatería	87,988	150,664.49
Cáñamo en toda forma	4,305	1,189.81
Cerveza y ginger ale	50,307	4,612.53
Comestibles	222,220	39,959.16
Cristalería	25,795	6,266.56
Cueros en artefactos	1,428	3,406.04
Drogas y medicinas	360,312	136,592.68
Especias y té	5,655	2,085.94
Ferretería	2,662,697	261,865.25
Fósforos	71	31.75
Harina	8,539,484	392,862.52
Lana en tejidos	958	1,572.36
Libros impresos	3,342	701.59
Licores	22,224	7,993.51
Lino en tejidos	65	210.00
Loza y porcelana	4,481	1,327.73
Madera y corchos	897,462	21,214.34
Maíz	1,436,800	32,196.92
Maquinaria	766,827	178,615.92
Maquinaria agrícola	118,375	28,526.77
Material para jabón y candelas	74,904	7,293.76
Mercería	2,912	1,355.06
Moneda	4	2,000.00
Drogas y medicinas	228,879	98,508.60
Especias y té	2,940	739.80
Ferretería	923,166	114,967.89
Harina	6,426,845	263,236.94
Joyería	209	244.91
Lana en tejidos	377	411.81
Libros impresos	2,808	1,384.10
Licores	19,387	5,963.53
Lino en tejidos	92	112.00
Loza y porcelana	1,999	435.78
Madera y corchos	77,678	1,742.48
Maquinaria	195,972	67,936.12
Maquinaria agrícola	49,871	13,913.50
Mármol	18	....
Material jabón y candelas	51,208	5,503.94
Mercería	15,185	9,159.28
Muebles y obras de ebanistería	16,825	7,756.26
Papel y artículos de escritorio	40,053	4,538.21
Petróleo y aceite para alumbrado	600,293	19,529.77
Perfumería	4,647	1,799.52
Plantas y semillas	1,409	510.62
Quesos y mantequilla	2,115	719.64
Sacos para café	29,968	3,868.10
Seda en hilo	248	2,207.38
Seda en tejidos	1,242	12,010.41
Tabaco en toda forma	374	220.93
Sombreros varias clases	1,141	3,038.73
Velas esteáricas	11,401	1,783.93
Vinos	156,545	19,504.58
	13,650,778	1,815,051.19

Artículos.	Peso en kilos.	Valor en dólares.
1912.		
Muebles y obras de ebanistería	20,906	8,498.66
Papel y artículos de escritorio	40,126	9,458.77
Petróleo y aceite para alumbrado	632,108	21,284.46
Perfumería	3,766	3,711.49
Plantas y semillas	7,442	1,163.75
Quesos y mantequilla	1,883	1,046.81
Sacos para café	21,011	2,532.00
Seda en hilo	80	617.50
Seda en tejidos	997	9,858.53
Sombreros varias clases	1,220	4,098.65
Tabaco en toda forma	331	720.67
Velas esteáricas	22,517	3,457.36
Vinos	130,249	18,101.07
	24,004,779	2,627,700.22
1913.		
Abonos preparados	1,294,527	43,628.03
Abonos ingredientes para	108,089	5,031.47
Aceite de máquinas	127,158	9,727.14
Aceite alimenticio	56,495	9,160.44
Aceites secantes	14,059	1,719.95
Aceite para alumbrado	807,868	30,927.48
Aceite medicinal	47,051	16,550.06
Aceitunas	137	22.80
Acero en barras o planchas	2,200,625	80,449.43
Acero en piezas para construcción	182,652	7,793.12
Aguas de olor	4,104	1,625.29
Aguas minerales	25,520	1,236.73
Alambre para cercas	1,117,573	55,711.11
Alambre para telégrafo	1,114	85.28
Alambre liso	50,248	3,941.44
Alfombras	1,205	331.80
Algodón absorbente	6,844	2,724.80
Algodón manufacturado	23,260	19,424.63
Algodón en hilo	1,992	2,396.84
Algodón en mantas	429,698	211,331.58
Algodón en géneros blancos	12,379	7,189.67
Algodón en géneros estampados	[illegible]	51,362.16
Algodón en driles	83,444	49,616.95
Algodón en otras formas	2,930	648.06
Animales:		
Aves de corral	17	113.00
Ganado caballar	1,849	981.59
Ganado vacuno		415.00
Ganado porcino	70	885.50
Perros	36	160.00
Otros animales	626	490.50
Armas:		
Escopetas	578	1,215.50
Espadas	32	36.30
Revólveres	686	7,209.18
Rifles	792	995.76
Cartuchos cargados	34,592	17,734.40
Machetes	340	271.33
Artículos de caucho	14,500	15,556.72
Artículos diversos	254,483	37,099.00
Artículos de bronce	269	451.84
Artículos de escritorio	17,791	7,399.03
Artículos de propaganda	7,812	1,465.36
Azúcar	207	24.50
Botones	1	2.50
Brochas para pintores	230	137.98
Carbón mineral	39,641	662.52
Cereales	[illegible]	461.39
Chocolate	1,290	377.99
Calzado y artículos de zapatería	[illegible]	21,009.08
Cáñamo en cuerdas	1,320	421.38
Cáñamo en tejidos	100	78.00
Cemento	1,743,486	18,268.75
Cepillos	976	170.04
Cerveza	[illegible]	6,143.16
Cobre en clavos	158	20.71
Cobre en láminas	1,569	609.60
Cobre en otras formas	1,139	492.98
Confitería	1,630	480.96
Conservas alimenticias	40,260	10,588.19
Cristalería:		
Espejos	2,498	409.02
Otros artículos	[illegible]	4,284.69
Cueros preparados	[illegible]	175,719.15
Cueros en artefactos	1,555	3,709.89

Articulos.	Peso en kilos.	Valor en dólares.
1913.		
Dinamita	102,978	27,638.68
Sales de quinina	2,342	1,959.26
Artículos de farmacia	350,959	132,891.23
Productos químicos	94,129	29,938.89
Ebanistería y construcción	179,783	10,371.41
Embarcaciones menores y accesorios	19,262	3,359.50
Equipajes sin valor	1,778	....
Especias y té	21,418	8,357.69
Estaño en barras	99	107.34
Ferretería:		
Herramientas agrícolas	21,285	5,350.91
Láminas para techos	875,431	54,445.46
Clavos	270,297	9,945.52
Cañería	251,453	17,683.32
Instrumentos para artes y oficios	24,874	9,578.31
Hierro en barras	1,866,172	37,410.66
Otros artículos	363,935	55,233.75
Frutas frescas	38,290	3,126.10
Frutas secas y conservadas	28,007	4,494.78
Galletas	1,116	258.87
Gasolina	75,734	5,744.70
Harina	7,814,737	325,220.42
Hojalata	32,867	2,864.76
Instrumentos de Cirugía	498	773.83
Instrumentos de ingeniería	124	517.50
Instrumentos de música	6,683	6,128.52
Instrumentos de otras clases	5,876	1,220.62
Jabón	8,572	2,656.02
Joyería	5	38.41
Juguetes	496	279.70
Cola	12	2.00
Libros impresos	5,542	4,348.46
Libros en blanco	2,089	1,726.93
Licores	33,576	9,677.13
Lino en otra forma	2	8.90
Loza y porcelana	24,468	709.58
Madera	1,552,976	24,862.18
Maíz	30,017	4,410.44
Maicena	34,609	1,234.50
Manteca de cerdo	2,269	570.60
Maquinaria agrícola	370,910	82,731.19
Maquinaria industrial	175,522	21,427.88
Máquinas de coser	274,204	67,217.20
Máquinas para otros usos	268,840	70,583.10
Mármol en planchas	4,105	776.63
Material eléctrico	173,233	59,337.01
Material para ferrocarril	4,117,840	209,482,00
Material para fotografía	1,334	674.07
Material pª jabón y candelas	162,065	16,267.05
Mercería	34	38.84
Moneda de oro	7	1,489.05
Mostaza preparada	52	6.00
Muebles	22,098	7,949.82
Material de imprenta	32,620	15,085.85
Muestras y anuncios	14,668	1,330.85
Papel de escribir	800	206.91
Papel de imprenta	183,189	10,186.77
Papel de empaque	58,539	3,322.44
Papel otras clases	5,483	2,578.85
Perfumería	10,470	9,868.05
Pintura en polvo	10,221	1,465.82
Pintura preparada	16,567	3,976.83
Pólvora	8,851	1,258.00
Plantas y semillas	31,649	1,638.84
Plomo en barras o planchas	983	150.34
Plomo en artefactos	13	4.00
Quesos y mantequilla	5,067	1,130.11
Relojes	1,082	1,756.28
Sacos para café	5,373	887.38
Seda en hilo	128	628.61
Seda en tejidos	122	380.00
Seda manufacturada	489	4,606.23
Sombreros de fieltro	212	444.00
Sombreros otras clases	102	233.17
Sustancias alimenticias no conservadas	21,237	2,309.49
Tabaco en rama	202	164.80
Tabaco elaborado	106	71.98
Vino:		
Blanco	2,370	217.36
Tinto	40,209	4,655.63
Medicinal	7,839	3,821.64
Vermouth	1,154	231.00
Generosos	119,994	11,560.73

Artículos.	Peso en kilos.	Valor en dólares.
1913.		
Vehículos y accesorios	136,264	29,407.52
Velas esteáricas	19,699	2,987.09
Zinc en láminas para precipitados	4,619	815.00
	29,551,839	2,406,888.44
1914.		
Abonos preparados	557,540	31,694.18
Abonos ingredientes	11,518	809.79
Aceite de máquina	105,399	11,686.30
Aceite alimenticio	78,092	11,476.85
Aceite para alumbrado	590,491	20,453.88
Aceite secante	9,451	1,518.80
Acero en barras o planchas	40,827	4,738.75
Acero en piezas de construcción	15,707	1,565.00
Aguas de olor	1,543	610.90
Aguas minerales	5,236	2,336.84
Alambre para cercas	989,194	44,250.50
Alambre liso	9,008	425.16
Alambre para telégrafo	864	59.58
Alfombras	234	154.46
Algodón absorbente	4,680	1,987.18
Algodón hilaza o bruto	1,752	327.43
Algodón driles	53,229	34,749.40
Algodón géneros blancos	1,656	2,108.96
Algodón géneros estampados	67,516	57,716.43
Algodón hilo	1,429	1,693.46
Algodón mantas	721,419	351,687.04
Algodón manufacturado	16,197	12,271.47
Aluminio en artefactos	69	390.15
Aluminio en bruto	2,834	1,000.00
Animales:		
Aves de corral	344	427.40
Ganado vacuno	1,241	675.00
Pájaros	43	135.00
Perros		155.00
Otros animales	146	29.05
Aparatos y sustancias de higiene	390	46.55
Armas:		
Cartuchos	47,377	24,781.96
Escopetas	209	205.74
Fusiles de caza	198	366.67
Machetes	1,234	574.77
Revólveres	123	1,591.55
Artículos de caucho	13,975	13,621.28
Artículos de escritorio	36,814	10,117.52
Artículos de laboratorio	165,712	13,618.99
Artículos de sport	38	145.85
Artículos de tocador	6,426	5,179.41
Artículos de uso doméstico	1,360	345.74
Artículos varios	3,395	1,558.13
Bronce en barras o planchas	528	151.45
Bronce en objetos	88	104.33
Cacao molido	10	4.50
Calzado y artículos de zapatería	34,732	20,027.15
Cáñamo en cuerdas	1,476	594.97
Cáñamo en tejidos	2,717	775.78
Carbón mineral	18,176	341.00
Carburos:		
Bencina	335	13.63
Calcio	17,171	10,074.60
Gasolina	111,851	6,622.19
Kerosina	26,453	847.84
Nafta	26	3.65
Otros	191	140.00
Cartón manufacturado	1,913	213.96
Cereales	137,447	11,455.00
Cerveza	104,545	7,935.98
Cemento	1,193,461	11,651.01
Cobre en láminas	287	101.86
Cobre manufacturado	222	102.99
Confitería	3,641	912.85
Conservas alimenticias	38,147	9,483.18
Cristalería:		
Espejos y vidrios planos	3,337	850.42
Otros artículos de vidrio	9,852	1,587.92
Ebanistería	18,955	1,098.21
Embarcaciones menores	19,188	6,742.31
Especias	7,370	3,302.98
Estaño en barras y planchas	142	105.60
Estaño manufacturado	252	112.40

Artículos.	Peso en kilos.	Valor en dólares.
1914.		
Explosivos industriales	94,110	20,723.32
Fulminantes	2,675	1,854.97
Farmacia:		
Artículos	13,760	4,174.64
Específicos	5,081	2,408.49
Medicinas corrientes	127,921	68,770.16
Productos químicos	12,896	13,248.13
Ferretería:		
Cañería	533,605	27,843.75
Clavos	96,547	4,417.95
Hierro en barras	210,399	7,469.77
Herramientas agrícolas	21,480	5,517.90
Instrumentos para artes y oficios	15,400	7,619.55
Láminas para techos	468,211	27,692.90
Otros artículos	337,476	58,481.46
Forrajes	60,324	1,719.89
Frutas frescas	78,456	5,318.33
Frutas secas y conservadas	18,229	3,198.82
Galletas	2,448	511.55
Ginger ale	112	15.00
Harina:		
Maíz o maicena	43,528	5,704.64
Sagú	716	73.37
Trigo	6,954,029	319,050.83
Otras	4,152	423.63
Hojalata	38,551	2,822.98
Instrumentos de Cirugía	63	136.26
de ingeniería	261	816.79
de música	9,010	6,250.99
Óptica	53	321.08
Otros	222	340.66
Implementos de artes liberales	119	141.34
Jabón	445	99.13
Jarabes y extractos azucarados	4,161	2,095.15
Joyería	12	13.20
Juegos permitidos de salón	215	204.19
Juguetes	474	220.70
Lana manufacturada	15	71.50
Lana en tejidos	308	898.91
Libros en blanco	1,510	572.05
Libros impresos	2,873	2,120.75
Lino en tejidos	32	51.00
Licores y bebidas espirituosas	16,908	6,726.00
Loza y porcelana	143	52.25
Madera:		
Artefactos	91,910	3,355.25
Bruto	265,771	3,410.42
Corchos	74	113.30
Maíz	166,143	7,105.90
Manteca de cerdo	116	15.35
Maquinaria agrícola	423,759	80,393.84
De coser	32,785	11,290.32
De escribir	7,122	8,060.99
Industrial	246,463	40,321.52
Otros usos	56,662	21,246.43
Mármol en planchas	41	4.00
Material de construcción	211,557	10,996.07
Material eléctrico	121,161	34,345.55
Material para ferrocarril	362,514	45,961.31
Material para fotografía	2,489	1,282.21
Material de higiene	87	30.73
Material para jabón y candelas	118,630	15,423.42
Material de imprenta	31,016	9,054.06
Mercería	319	378.26
Moneda de papel	....	1,000.00
Moneda de plata	5,421	90,000.00
Muebles	23,544	7,686.11
Muestras y anuncios	25,592	3,669.35
Objetos artísticos de salón	201	449.13
Objetos de uso personal	2,942	2,318.75
Perfumería fina	1,177	1,215.87
Peletería:		
Artefactos de cuero	6,636	17,402.40
Cueros preparados	57,708	160,622.69
Papel de empaque	42,688	1,527.68
Papel de escribir	750	401.67
Papel estraza	961	115.56
Papel de imprenta	172,970	8,728.01
Papel tapiz	11	24.00
Papel otras clases	9,832	3,851.37

Artículos.	Peso en kilos.	Valor en dólares.
1914.		
Pintura en polvo	12,871	2,012.83
Pintura preparada	11,916	2,561.07
Plantas y semillas	32,738	1,707.72
Plomo en artefactos	403	45.88
Plomo en barras o planchas	515	68.89
Harina lacteada	29	18.00
Productos lácteos:		
Mantequilla	1,659	1,255.61
Quesos	299	115.00
Otros	[illegible]	13.50
Sacos para café	94,076	16,175.00
Sacos para azúcar	39	20.00
Seda en hilo	81	655.50
Seda manufacturada	103	1,615.00
Sustancias alimenticias (te mate)	3,032	736.63
No conservadas	3,225	316.31
Sombreros de fieltro	297	1,272.00
Sombreros para señora	8	80.00
Tabaco elaborado	75	228.00
Tabaco picado	46	42.63
Tabaco en rama	78	106.60
Vajilla	46	370.00
Vino:		
Blanco	817	101.25
Generoso	83,694	7,951.63
Tinto	31,691	2,660.40
Vehículos y accesorios:		
Aereoplanos	1,187	253.87
Automóviles	17,213	15,695.83
Bicicletas	822	325.40
Carretones	48,762	2,124.95
Carruajes	49,072	4,637.04
Motocicletas	802	720.00
Cochecitos para niños	114	37.80
Velas esteáricas	15,147	2,066.44
Yeso	2,325	1,185.81
Zinc en láminas para precipitados	3,325	512.60
	17.500,561	2.027,731.84

Detalles exportación para Estados Unidos en 1905–1914.

Artículos.	Peso en kilos.	Valor en pesos plata.
Añil	6,315	13,800.00
Artículos diversos	8,011	10,363.12
Azúcar	33,669	3,760.00
Bálsamo	11,168	39,589.10
Brozas minerales (oro y plata)	8,223	169,759.00
Café en oro	4,449,781	1,805,066.04
Café en pergamino	339,682	116,987.52
Cueros de lagarto	2,535	1,527.76
Cueros de res	37,282	25,276.20
Cueros de tigre y jabalí	31	51.00
Cueros de venado	14,835	17,945.68
Hule	16,612	32,791.60
Libros impresos	117	100.00
Madera (caoba, cedro y mora)	162,943	5,630.00
Miel y melaza	1,339	51.25
Oro en bruto	1,023	524,012.00
Plata aurífera	31	18,895.00
Plata en bruto	759	277,200.00
	5.094,356	3.062,603.27
1906.		
Artículos diversos	5,021	7,464.61
Azúcar	224	50.00
Bálsamo	12,554	48,125.00
Becerros	179	550.00
Brozas de cobre	18,539	50,900.00
Brozas minerales (oro y plata)	28,536	460,037.00
Café en oro	5,903,321	2,415,288.47
Café en pergamino	237,073	90,371.58
Cueros de caimán	5,029	3,345.56
Cueros de res	29,897	20,174.4

Artículos.	Peso en kilos.	Valor en pesos plata.
1906.		
Cueros de venado	12,856	14,074.61
Frijoles	106	30.00
Harina	29	100.00
Hule	11,467	24,825.47
Libros impresos	13	12.00
Madera (caoba y cedro)	22,080	420.00
Maquinaria	557	388.31
Oro en bruto	3,214	2,487,513.00
Plata aurífera	344	21,524.00
Plata en bruto	5,148	89,661.00
Sellos postales	14	500.00
	6,296,161	5,725,615.05
1907.		
Artículos diversos	10,998	4,012.69
Bálsamo	19,276	60,775.00
Brozas de cobre	11,111	20,380.00
Brozas minerales (oro y plata)	1,128	3,430.00
Café en oro	5,363,723	2,218,516.78
Café en pergamino	26,205	9,265.90
Cueros de caimán	3,106	2,794.96
Cueros de res	30,596	22,819.58
Cueros de venado	8,979	10,445.03
Hule	7,316	15,511.50
Madera	44,033	1,512.00
Oro en barras	5,186	1,788,571.00
Plata en bruto	13,266	803,972.75
Plomo en bruto	7,573	84,140.00
	5,552,496	5,046,147.19
1908.		
Añil	7,627	24,750.00
Artículos diversos	6,959	5,416.60
Azúcar	368,920	66,700.00
Bálsamo	19,189	51,987.50
Brozas de cobre	743	21,490.00
Brozas minerales	4,052	10,620.00
Café en oro	4,603,187	1,923,389.36
Café en pergamino	88,512	30,108.25
Cueros de marrano	1,416	148.90
Cueros de carnero	1,455	1,670.22
Cueros de res	8,536	7,237.74
Cueros de venado	13,182	15,184.94
Frijoles	97	12.60
Hule	12,689	24,488.09
Oro y plata en barras	16,548	2,915,590.21
Plomo en bruto	3,870	15,200.00
	5,156,982	5,115,994.41
1909.		
Añil	16,591	102,993.00
Artículos diversos	20,084	11,234.59
Azúcar	54,970	10,150.00
Bálsamo	26,186	101,003.09
Brozas minerales	51,755	38,138.80
Café en oro	4,653,266	1,965,497.80
Café en pergamino	257,305	88,370.16
Cueros de caimán	2,116	2,084.62
Cueros de res	24,120	20,659.08
Cueros de venado	13,781	16,493.26
Frijoles	147	19.20
Hule	8,908	15,940.38
Jarcia	37	30.00
Oro en barras	2,006	1,836,025.45
Plata en barras	14,655	801,987.60
Plomo en bruto	5,705	1,250.00
	5,151,630	5,011,876.98
1910.		
Añil	443	3,000.00
Artículos diversos	16,018	37,171.92
Azúcar	1,666	362.20
Bálsamo	13,112	39,300.00
Brozas minerales	1,785	87,611.00
Café en oro	6,028,954	2,631,075.35
Café en pergamino	228,713	78,421.80
Cueros de caimán	990	940.00

Artículos.	Peso en kilos.	Valor en pesos plata.
1910.		
Cueros de res	376,540	44,863.65
Cueros de carnero	138	170.00
Cueros de venado	11,980	13,197.05
Frijoles	115	17.76
Harina	6	1.20
Henequén	7,983	1,350.00
Hule	18,291	38,604.90
Oro en barras	1,805	1,503,296.60
Panela	6,560	800.00
Plata en barras	19,234	1,217,658.58
Plomo en barras	6,212	1,329.42
	6,740,545	5,699,171.47
1911.		
Azúcar	54,428	11,812.00
Artículos varios	13,000	20,986.50
Astas	1,616	2,018.00
Bálsamo	19,081	67,150.00
Brozas minerales	2,301	38,557.50
Barras oro y plata	13,606	818,761.11
Brozas oro y plata	920	2,345.00
Café en oro	6,170,599	3,168,974.80
Café en pergamino	59,619	23,733.85
Equipaje	34	60.00
Escoria mineral	720	1,250.00
Escoria oro y plata	460	395.00
Frijoles	46	8.08
Henequén	4,623	520.00
Hule	12,885	27,221.60
Malte	180	....
Maquinaria	194	375.00
Oro en barras	3,033	1,789,208.15
Oro y plata en barras	2,537	298,742.00
Oro y plata	2,000	122,455.00
Oro y plata revuelto	916	76,325.00
Plata en barras	6,747	378,123.29
Pieles de venado	9,422	10,429.58
Pieles de res	22,441	19,185.11
Pieles de caimán	778	732.60
Pieles de cabra	209	180.26
Tubo de hierro	2,316	2,600.00
	6,404,809	6,882,149.43
1912.		
Añil	483	817.60
Artículos diversos	16,269	13,648.80
Azúcar	279	60.60
Bálsamo	15,518	50,450.00
Brozas minerales	10,917	18,925.00
Café en oro	5,063,118	3,302,033.40
Café pergamino	60,616	32,941.00
Cueros de res	27,586	22,297.74
Cueros de carnero	784	677.20
Cueros de caimán	436	377.10
Frijoles	295	53.87
Henequén	61,964	27,531.55
Hule	13,072	24,186.10
Jarcia	227	196.75
Malte	403	38,388.32
Nueces de coco	878	90.00
Oro en barras	1,329	1,365,400.19
Oro y plata en barras	21,379	1,437,915.95
Oro y plata	345	39,000.00
Pieles de venado	7,154	7,417.70
Plata en barras	3,573	259,842.50
	5,299,577	6,642,234.37
1913.		
Algodón prensado	637	337.75
Artículos varios	19,056	16,466.95
Azúcar	372	80.80
Bálsamo	32,608	108,005.00
Brozas minerales	4,895	4,853.30
Café en oro	4,958,641	3,233,720.80
Cerda	276	4.50
Comestibles	68	10.00
Cuernos	4,653	75.75
Cueros de cabra	252	219.20

Artículos.	Peso en kilos.	Valor en pesos plata.
1913.		
Cueros de chivo	173	188.50
Cueros de res	19,281	10,734.10
Cueros de ternera	35	38.00
Cueros de venado	7,974	12,052.50
Escorias minerales	2,702	3,713.70
Frijoles	36	12.00
Henequén	23,616	9,022.94
Hule	6,426	15,371.35
Malte	460	7,044.00
Muestras minerales	293	15.00
Nueces de coco	333	70.10
Oro en barras	1,557	1,377,736.97
Oro en escoria	926	1,055.00
Oro y plata en barras	23,729	1.829,956.02
Oro y plata en broza	460	425.00
Oro y plata	363	51,870.00
Oro y plata en escoria	4,657	2,987.50
Plata en barras	3	1,303.30
Slimas	1,049	1,249.00
	5,115,531	6,691,590.03
1914.		
Arroz	8,280	10,080.90
Artículos diversos	14,562	11,781.93
Azúcar	6,884	805.00
Abonos	19,102	4,082.50
Añil	29,380	51,784.46
Bálsamo	30,812	91,469.00
Brozas minerales	12,787	8,692.72
Café en oro	4,857,312	3,160,237.70
Carbón	36	22.93
Cobre viejo	1,505	669.70
Concha nácar	1,435	998.32
Cueros de res	51,643	37,021.26
ueros de chivo	248	203.60
ueros de marrano	208	25.00
ueros de carnero	10	14.00
Ceniza	125	106.40
Cilindros vacíos	2,254	1,140.80
Escorias	6,044	4,564.00
Frijoles	46	6.36
Gengibre	166	36.00
Hule	3,175	5,526.00
Henequén	45,555	19,103.25
Malte	289	847.05
Muestras minerales	21,593	930.75
Pieles de venado	12,539	12,148.57
Pieles de cabra	17	37.36
Plata aurífera	443	35,209,00
Plata acuñada	162	2,344.96
Oro en barras	2,606	1,284,665.00
Oro y plata en barras	23,874	1,905,333.88
Slimas	924	3,990.56
Oro fundido	1	1,500.66
Zinc	37	116.80
Tanques de hierro	14	25.00
	5,154,066	6,655,420.52

RESUMEN.

El presente trabajo tiene por fin estudiar la situación comercial de mi patria, con los Estados Unidos de Norte América.

El cambio internacional de productos, trae como consecuencia la más estable base de amistad y armonía entre pueblos y gobiernos. Las rivalidades comerciales producen la guerra.

El Salvador fué poco favorecido por la naturaleza en cuanto a su hidrografía. Su única costa, en el Pacífico, es poco extensa [160 millas]. No tiene un solo río naturalmente navegable para buques de mediano tonelaje; y para ir por camino corto al oriente de Estados Unidos y Europa, es preciso pasar por ter-

ritorios extraños. La fertilidad de nuestro suelo, la potencialidad demográfica, y la intensidad de trabajo del pueblo, han hecho una nación próspera que disfruta de los bienes de la civilización.

La riqueza de El Salvador se deriva del suelo y del subsuelo. Ordinariamente produce lo necesario para su alimentación, excepción de harina y otras substancias, y aun exporta granos a las Repúblicas vecinas, cuando las cosechas son abundantes. Al extranjero exporta café, oro y plata, añil, bálsamo, caucho, azúcar, pieles, henequén y tabaco. Algunos artículos que produce su naciente industria, los exporta a Centro América.

El café representa como el 80% de la exportación. Se tiene noticia que el primer envío de café al extranjero precisamente a California, se verificó en 1855 [19 quintales]. Comparando con la exportación de 1914 que fué de 37,682 toneladas, se tendrá una idea del progreso de este cultivo. Estados Unidos compró en un tiempo mucho café salvadoreño; se recuerda el año de 1892 en el cual se embarcó para dicho país el 60%. En 1914, fué el 14% lo que se envió a mercados americanos.

El añil fué anteriormente el cultivo principal de los salvadoreños. Varias causas, entre otras, la fabricación de añil sintético, produjeron la decadencia. Estados Unidos no ha tenido preferencia por nuestro añil.

Los metales preciosos extraídos de nuestras minas, han sido conprados casi en su totalidad por los Estados Unidos.

Los sucesos que han tenido influencia en el comercio de ambos países son: descubrimiento de oro en California; ferrocarril de Panamá y ferrocarril de Tehuantepec. Está reservado al porvenir el canal de Panamá y el ferrocarril de Santa Ana a Zacapa.

El comercio exterior de El Salvador con Estados Unidos comparado con el conjunto de las naciones de la América Latina es poco apreciable; pero la participación de Estados Unidos en nuestra vida comercial, es importante. Tomando una media de los últimos 10 años, resulta que la gran República nos compró el 30.11% de lo que vendemos y nos vendió el 38.25% de lo que compramos al extranjero.

Es notable la influencia que ha tenido la vía de Tehauntepec. La época en que dicha línea trabajó regularmente, coincide con el hecho de obtener Estados Unidos el primer puesto como importador en lugar de la Gran Bretaña.

En virtud del admirable adelanto de las industrias americanas, nuestros comerciantes bien pudieran comprar indistintamente en Estados Unidos o Europa, salvo especialidades que podemos considerar como convencionales, si los hombres de negocios de los Estados Unidos llegaran a convencerse que no es precisamente la venta al contado o a apremiantes plazos, el medio más a propósito para ensanchar su comercio, cuando los clientes tienen motivos para ser tratados como solventes.

Contribuiría a mantener y a aumentar la prosperidad de los negocios con los Estados Unidos, una amistad cordial con su ilustrado Gobierno, basada aquella en el mutuo respeto de los derechos y deberes internacionales; la paz de México; el mejor servicio de vapores en el Pacífico y la disminución de su tarifa de fletes y pasajes; la fundación de sucursales de bancos americanos en El Salvador; la mutua exhibición de productos, y la propoganda por folletos y por intercambio de conferencistas; las mayores facilidades para la navegación en el canal de Panamá, con sujeción a las reglas observadas en el canal de Suez; la construcción del ferrocarril de la ciudad salvadoreña de Santa Ana, a la ciudad guatemalteca de Zacapa; y finalmente, que se proceda a la mayor brevedad al saneamiento de nuestros puertos y mejor iluminación de nuestras costas.

El Salvador acoge con simpatía todo trabajo tendente a estrechar los vínculos políticos, económicos e intelectuales de las naciones americanas. Su cooperación, aunque modesta, es leal, sincera y entusiasta.

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A COMMON MONETARY UNIT FOR AMERICA.

By GUILLERMO SUBERCASEAUX,
Professor of Political Economy in the University of Chile.

A common money unit for use throughout America:—Central and South American countries have several different monetary units varying in value from the "Bolivar" of Venezuela to the "Peso" of Uruguay. International exchange between American nations would be greatly benefited by the adoption of a common monetary unit as was done by the countries adhering to the Scandinavian and Latin "Monetary Union." All American nations interested in this matter should try to bring about an exchange of ideas on this question.[1]

I.

HISTORICAL OUTLINE OF THE MONETARY SYSTEM THROUGHOUT NORTH AND SOUTH AMERICA.

The primitive inhabitants of America—that is to say, those found by the Europeans on their discovery and conquest of America—had no object specially destined to fill the rôle which is fulfilled by the coined money of to-day, but used as money such merchandise as most adapted itself to easy exchange. The system of exchange (or barter) of one kind of merchandise for another, was the only way in which those primitive people carried on their small commerce.

The American aboriginal had just then taken the first step toward establishing a monetary system, which was still in the form of merchandise; that is to say, certain merchandises which specially lent themselves to this object had taken the form of a monetary standard.[2]

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[1] Subject of the preliminary program treated by the Second Pan American Scientific Congress held in Washington (1915).

[2] The Mexicans held certain fairs or markets to which the different goods to be exchanged were brought, and there those interested, bartered one merchandise for another. According to reliable historians five different kinds of merchandise were distinguished by their use as money. A certain kind of cocoa, small pieces of cotton, small transparent quills containing grains of gold, pieces of copper in the form of T, and also pieces of tin. (Francisco Clavijero, Hist. Antigua de Mexico, trad. del italiano, Vol. I.)

Winsor's History of America, published in Boston and New York, referring to this matter says: "There is no good comprehensive account of American prehistoric trade. The T-shaped pieces of copper in use by the Mexicans came nearest to currency as we understand it, unless it be wampum of the North American Indians, and the shell

Metallic money coined by the State was instituted in America by the European conquerors. The real monetary system, properly speaking, began with the European colonization.

The nations created by the European conquest and colonization, beginning with the fifteenth century, that is to say, the European colonies, had the money authorized by their respective Governments.

On American countries constituting themselves independent, they adopted their own monetary system.

American nations on establishing their national monetary system took as their standard unit that which had the greatest circulation in America at that time. The monetary system of the American Republics was in a certain measure derived from the colonial standard.

The forerunner of the peso of the Spanish American countries, as well as of the United States dollar, was the old peso or duro of Spanish origin. This was the coin called "pieces of eight," "reales de a ocho," which was coined in America in the sixteenth century. The first pieces of eight, reales de a ocho, known to us and coined in America, belonged to the reign of Phillip the Second, and were coined in the mints of Mexico and Potosi. (Adolfo Herrera, El duro.)

José T. Medina mentions pieces of eight coined in the reign of Charles V in Mexico. The coin piece of eight contained in its early condition 423.9 grains of silver, whose proportion of pure silver was .931. That is to say, the piece of eight contained 394.5 grains of pure silver.[1] This quantity underwent several modifications later.

There was also a gold coin of equal value.[2]

This coin, "piece of eight," constituted from the Spanish peso, which had such a large circulation during the colonial epoch, is, as I have said, the forerunner of the greater part of the American monetary systems.

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money in use on the Pacific coast, but it should be remembered that copper axes and copper plates served such a purpose with some tribes.

The chief source of trade in such condition was barter, and we know how the Mexican traveling merchants got information that was availed of by the Mexican marauders in their invasions.

Baudelier gives us references on the barter system, the traders and the currency in that country, and we need to consult B. W. Behrnauer's "Essai sur le commerce dans le Mexique et en Perou," in the Archives de la Soc. Amer. de France.

In general the system of barter or exchange of merchandise was predominant. Father Acosta, quoted by the Chilean historian José T. Medina, says that the Indians in order to sell or purchase used no money but exchanged one thing for another, the same as the ancient people referred to by Homer and Plinus. There were some things much esteemed by the people which served as currency; and even until the present day the Indians still preserve this custom. ("Money used by the Indians," Annals of the University of Chile, 1910.)

We can see, then, that certain articles such as "coca," "cocoa," etc., were used as currency, whether these were products which were scarce in some parts and were brought there for exchange or were manufactured goods such as textiles, etc.

The American Indians thus found themselves in that early period taking the first step toward establishing a currency in which money was a merchandise, but was distinguished amongst the others for its facility of interchange. Coined money, that is to say, a certain currency established by the State for monetary transactions, was then unknown in America. In spite of the progress of the Peruvian Incas, due perhaps to the community organization of their economical system, their monetary condition was very little developed. The want of a standard money is little felt where the State regulates the distribution of goods and where there is not private holdings.

[1] "Dollar," Palgrave, Dictionary of Pol. Ec.

[2] Father Rosales in his History of Chile says: "By the decree of March, 1613, every gold peso castellano was ordered to be valued at 589 maravedies. The gold peso in Chile, being of perfect standard, was valued at 450 maravedies." (Monedas Chilenas, J. T. Medina.)

The first national money in Chile was that ordered to be coined immediately after the establishment of the independent government in Santiago under decree dated June 9, 1817. This was a silver coin of the same weight and alloy as the existing colonial one, but instead of the effigy of the Spanish Kings bore the inscription "Libertad," "Union," and "Fuerza."

The same was afterward done with the gold coins. The first national monetary law enacted by the Chilean Congress was that of October 24, 1834, which determined gold and silver coins on the existing base of the peso. In 1851 the decimal system was employed for the first time in Chilean coinage; the gold peso weighing 1.521 grains with 0.9 degree of fineness, and the silver peso weighing 25 grams with an equal degree of fineness.

In the Argentine Republic the gold and silver currency of the colonial period remained in circulation during the early days of independence, until 1813. (Felix Martin Herrera, Curso de Economia Politica. Buenos Aires, 1903.) At this time the National Assembly decreed that gold and silver money should be coined in the Potosi mint. These coins had the same weight and alloy as those they were replacing, thus the origin of the Argentine monetary system was derived from the Spanish one with the peso as unit.

The national monetary system was established in Mexico in the year 1823. "But only as regards the emblematic part of the coin, because this still retained the intrinsic value, weight, and fineness of 40 years before." (P. Macedo, G. Martinez Sobral, La reforma monetaria de Mexico. Mexico, 1909.)

The same happened more or less in all the other Republics of Spanish origin, their monetary systems were merely derived from the old Spanish one.

The Brazilian monetary system was only a derivation from that of Portugal. See: (J. P. Calogeras, La politique monetaire du Brazil. Rio de Janeiro, 1898, and A. Cavalcanti, O meio circulante nacional. Rio de Janeiro, 1893.)

The United States during the colonial epoch used English coins, but on account of the scarcity of this currency it may be said that it only existed in name and was called "money of account." The Spanish peso was really the circulating medium and was used in the majority of transactions (H. White). On the Declaration of Independence the dollar was adopted as the national money standard, but this was really the Spanish peso coined as a national money by the new Republic. On making this reform which gave a uniform monetary system to the American confederation, it was necessary to overcome some difficulties.[1]

In 1786 the weight of pure silver in the dollar was fixed in 375.64 grains of fine silver, the alloy being one-twelfth. The relative value of gold to silver was in that time (1792) in the ratio of 1:15.

The monetary system adopted by all the Republics of both Americas based on the Spanish "peso" was the bimetal system then in use throughout the world.

From the preceding we see then that the money unit of the different American countries whether called "the nacional" in the Argentine, the "Bolivar" in Venezuela, the "cóndor" in Colombia, the "sucre" in Ecuador, the "sol" in Peru, the "boliviano" in Bolivia, or the "dollar" in the United States, all come from one common root, the old peso of the Spanish colonies.

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[1] The relative value between the peso and the English money was not the same in all colonies.

In North Carolina and New York the dollar was worth 8 shillings. In Georgia it was worth 5 shillings. In Virginia 6, etc. (The principles of money, Laughlin. London 1903, p. 456.)

The name or word "dollar" is derived from the German of Bohemia "thaller" of the sixteenth century, when it was called "reichs-thaler" or "rix-dollar." This was the origin of the name "dollar" applied to the Spanish peso. (Dollar, Dictionary of Political Economy, by Palgrave, London, 1915.)

We shall now consider the reasons why the different monetary units of the American countries, although derived from one common base, should have followed such different courses and have such different histories.

Anyone studying the existing conditions of international exchange—that is to say, the gold value which the different monetary units of the different American Republics have to-day—finds it difficult to believe that they could have descended from the same origin. We have here the gold contained in each of these different monetary units.

United States, 1.672 grams of 0.900 fineness.

Mexico before the revolution (law of 1904), 0.833 grams of 0.900 fineness.

Honduras, silver standard.

Costa Rica, 0.7780 grams of 0.900 fineness.

San Salvador, silver standard.

Guatemala, silver standard.

Nicaragua, 1.6718 grams of 0.900 fineness.

Cuba, 1.672 grams of 0.900 fineness.

Venezuela, 0.32258 grams of 0.900 fineness.

Colombia, 100 pesos paper money, equivalent to 1 peso gold of 1.5976 grams.

Ecuador, 24 pence=0.73224 grams.

Peru, the sol or peso became so depreciated as to lose its value and in its place a new gold unit was established called a "libra" or pound sterling, the same as in England (law of 1897).

Bolivia has a limited silver currency and also bank paper. The international exchange is to-day about 15½ pence.

Chile, the gold peso is 0.599103 grams, with a fineness of 0.916. There is also paper money in circulation and the exchange on London is about 9 pence.

Argentine Republic, the gold peso weighs 1.6129 grams with 0.900 fineness, but with the advent of paper currency the conversion office redeems it at the rate of 44 cents gold for 1 peso.

Uruguay, 1.697 grams of 0.917 fineness.

Paraguay, paper currency. Gold commands a premium of 3.500%, more or less.

Brazil, the monetary unit is the "un milreis," redeemable before the war at 16d. by the Caixa de Conversão.

What have been the causes which have produced these differences in the value of the peso as an American money unit?

Why does the peso in some Republics like the United States and Uruguay maintain a value 100 times that of the peso in other countries, as, for example, Colombia?

Numerous causes have contributed toward this phenomenon.

The first of these is that when each Republic established its own national monetary system there was no common accord amongst them to found and to maintain an equal basis.

The quantity of fine metal employed in the coinage of the peso adopted by the different American Republics on entering their independent life was not always exactly the same; and, what was still more serious, in the different laws which came into force afterwards very little effort was made to maintain uniformity in the currencies of America.

During the previous bimetallic system the variations of value between gold and silver caused continual modifications to be made in the weight of the coins, assuring thus that the relative values enforced by law were in accordance with the relative values in the money market. Thus, for example, the United States, on establishing the bimetal system in 1792, had adopted the proportion of 15 to 1 between silver and gold. In 1817 the gold coins had disappeared from circula-

tion (H. White). To obtain a return of the gold to circulation a monetary reform was enacted in 1834 adopting the proportion of 16:1, which, being very favorable for the gold, tended to give this currency a dominant position.

Notwithstanding the monetary reform of 1816, made in England in favor of the gold unit, silver currency was still very popular throughout America.

In the different reforms introduced for one reason or another in the monetary system of various American nations no effort was made to proceed by common accord, each country proceeding freely and independently in fixing the amount of gold or silver which the respective coins ought to contain. We have here some of the units established by certain monetary laws previous to the year 1870; that is to say, during the period in which both gold and silver currencies were equally appreciated.

Chilean law, 1851: 1 peso silver=25 grams with 0.9000 fineness; 1 peso gold= 1.5253 grams with 0.9000 fineness.

Uruguayan law, 1862: 1 peso silver=25.480 grams with 0.917 fineness; 1 peso gold=1.697 grams with 0.917 fineness.

Mexican law, 1867: 1 peso silver=27.074 grams with 0.9027 fineness; 1 peso gold=1.692 grams with 0.875 fineness.

Peruvian law, 1864: 1 peso gold=1.6129 grams.

The fall in the value of silver, which took place after 1870, had a great effect on the whole bimetal system then existing throughout America.

The relative values of silver and gold had been maintained at about 15½:1 from the beginning of the nineteenth century until the year 1870; that is to say, during the independent life of the American Republics. From this date onward, and in the measure that the European nations (following the example of England) suspended the free coinage of silver and established gold as their only standard, the value of silver greatly decreased. This caused the exportation of the gold coins from the few American Republics which actually had them in circulation. I say in actual circulation, because at this time the majority were using paper currency.

In Chile, according to law, the relative value between silver and gold was 16.39:1; in consequence after 1870 all the gold coins in circulation disappeared, leaving only those of silver. The international exchange began to fall on account of the decrease in the value of silver.

The Republics which were not under the paper money régime were left with silver as their only monetary standard, although according to law they were still under a bimetal system. Mexico and Bolivia are still in this condition; the present rate of exchange for their national money is due to the depression in the value of silver. Mexico under law of 1867 had fixed a peso unit of 1.697 grams, but in 1905 was obliged to reduce it to 0.833 grams.

Another cause, even more serious than those mentioned and which explains the great differences in value between the monetary units of the different American countries, which had the Spanish peso as the origin of their monetary system, is the inconvertibility of their notes or paper money.

Nearly all the American Republics have been obliged to fall on paper currency during the first century of their independence.

The United States adopted paper currency in the year 1775, during the war for independence, and issued the so-called "Continental money," afterwards known as "a synonym for an absolutely worthless thing." They used it again from 1862 until 1875. Colombia established paper currency in 1881; Peru from 1875 until 1887.[1] Chile in 1865 had recourse to a brief paper currency,

[1] The paper money issued by Colombia in 1811 and by Peru in 1815 and 1822, which was a complete failure, as was that of the United States in early issues, is not mentioned.

which was soon called in. And, again, in 1878, this being redeemed in 1895, returning to the same system in 1898. To-day Chile is under the paper money régime.

The Argentine Republic issued paper money for the first time in 1826, and this system, with a few interruptions, was maintained until 1899. Paraguay has been until the present, and to-day is still under the paper-money system. In Brazil we find that the inconvertible paper currency began in 1820 and with a few short interruptions still continues under this régime. (See my work on this subject called "El papel moneda," Santiago, 1912.)

Few American Republics maintain themselves free from paper currency, and amongst these we may mention Uruguay, Bolivia, and Ecuador. This is due not so much to their good financial government as to the opposition of the people to accept the paper currency issued by the State.

Great fluctuations of the international exchange came together with the paper currency. In general it may be said that the depreciation of paper money has been a predominant feature. In Brazil international exchange which in 1841 stood at about 30 pence had fallen in 1905 to 15 pence. In the Argentine international exchange has been fixed by the redemption office ("Caja de Conversion") at 44 cents of the gold peso.

In Chile we have an exchange at 9 pence. The paper money régime of Peru brought the peso to a completely valueless condition in 1887. In Colombia this fall in the value of paper money has been detained at the exceedingly low rate of 1 peso gold for 100 paper.

In the United States the value of the dollar was greatly decreased, owing to the effects of paper money, and it was only possible to reestablish it at par, after suffering the consequences of a very serious crisis, and owing to the great national wealth.

If a complete understanding had existed among the American Republics in fixing the same peso as a monetary unit for all—that is to say, if the peso of all American countries had been of the same value in gold—the difference in value would have been caused, nevertheless, by the majority of the Republics having recourse to paper money.

Therefore the inconvertible note, or paper currency, has caused very serious discord amongst the monetary systems of the American Republics.

II.

THE QUESTION OF ADOPTING A COMMON MONEY UNIT THROUGHOUT AMERICA.

We have here a practical question of political economy. Is it possible to-day to adopt only one unit of money for all the American Republics? Is such a policy to be recommended?

Before going any further we must first inquire in what the reform would consist; that is to say, which project of monetary union ought to be adopted? As the American Republics are free and independent States, quite separate one from another, each one exercising its own sovereignty, the Pan American monetary union ought to be more or less the same as the Latin Monetary Union, which is formed by a convention composed of France, Belgium, Switzerland, Italy, and Greece, signed in 1865, and existing up to the present day.

According to this convention or agreement, carried out during bimetal times, each of the countries on signing the agreement compromised itself to adopt the French monetary system based on the franc. The coinage of each of them, whether of gold or silver or of different denominations or with different emblems,

should have or contain the same quantity of fine metal. Each of the contracting countries obliged itself to receive, without any limitation, in payments made to the Government, the gold coins and silver pieces of 5 francs issued by any of the others.

All other minor or divisionary coinage would only be received up to the amount of 100 francs, these divisionary coins to be exchanged for gold and for silver 5 franc pieces. The coin of each of the countries signing the agreement was not obligatory for contracts made by private individuals in any of the other States. Thus, for example, the Belgian coins were not legal tender in France. The agreement declared that all gold or silver coins of light weight ought to be retired from circulation.

In 1857 Austria and Germany made a similar agreement. Under this agreement the principal coins, which at that time were of silver, were legal tender in all the territory of the union. This agreement does not exist at present.

Another kind of monetary union which is without doubt the most perfect is that of the confederations, such as the United States and the German Empire. This type of monetary union requires a certain union or cohesion of the parties forming it, or, in other words, the establishment of certain legislative and executive powers common to all the contracting States. Pan Americanism has not advanced enough to allow for the adoption of such a system.

In consequence, the matter under study would be reduced to the carrying out of a great monetary arrangement between all the American Republics, for the adoption of a common unit or type of money more or less the same as the Latin union. The unit adopted as a basis for this system would of course be a gold one, and this the only one to be coined without restriction.

The first thing to be considered is if this project could be carried out; that is to say, if it is possible.

Theoretically we may say that there is no impediment against the carrying out of this ideal. The resolution of the contracting parties to adhere to a monetary agreement, stipulating a common unit of money for all the American Republics, would be sufficient.

Speaking practically, we may say that this project is quite possible, but at the same time there are so many difficulties to be surmounted, so many pitfalls to be avoided in the future, and, besides, so few advantages to be reaped from this reform that it does not appear to be recommendable. At present it would be more than sufficient if all the American Republics adopted the gold standard, either putting gold coin in circulation, as in the United States, or establishing a fixed rate of exchange, as in the Argentine Republic.

What are the difficulties to be overcome as regards the adoption of a common type of money for America?

At the beginning we must take note of the difficulties of an internal political kind that may occur in some of the Republics with regard to the approval of such an agreement. These difficulties would be greatest in those Republics where the monetary reform would cause the most serious changes in the monetary system.

Now let us suppose these difficulties have been overcome; and let us consider the case of the American Republics that have accepted the reform.

In the Republics where the reform means an alteration in the value of money in use it would be necessary to fix an equivalence between the new money and the old, for the payment of standing accounts. The contracts pending would be liquidated with the new money in the proportion of equivalence established by the law. Any difficulties in this respect caused by the change of the money standard would thus be solved.

A more serious difficulty would be that produced in the working of current prices. The general run of prices, such as salaries, rents of urban and rural property, prices of sundry merchandise of national production, the fees for certain professional attendance, etc., the fixing of which has been the result of a long historical process, would be completely altered by the change of the money. Let us suppose, for example, that the peso of the new money of the union had an increase of value in gold of 24¼ per cent above the value of the old peso in circulation at the time of the reform. In this case many prices, such as those of tramcars, of newspapers, of postage stamps, etc., that to-day are paid with 10 cents could not be paid with 7.775 cents of the new money on account of the difficulties such payment would offer. Probably many of the present prices would remain as they are now, causing a rise in the cost of living.

Supposing we pass over these difficulties, however serious they may be, as they are of a transitory nature, and would after some time of disturbance tend to form a new basis of prices, there would still remain other difficulties to be overcome.

Who would take charge of the fiscalization and control of the exact fulfillment of the agreement regarding the alloy and weight of the money coined? If the coinage of the money in one of the Republics of the union was deficient in this respect, who would oblige that Republic to rectify its procedure, and what would be the punishment for such an offense?

It would also be necessary to stipulate conditions or rules assuring that the coins of light weight, caused by circulation, would be substituted.

These difficulties, which are of no little importance practically, may easily be overcome by taking all the necessary precautions in the monetary agreement of the American Union. The greatest of all the difficulties would still remain; that is the danger of the inconvertibility of the notes or paper money.

Paper money causes the fluctuations of international exchange or the depreciation of the currency. This means the failure of the agreement.

This downfall of the agreement might only be temporary, but at the same time it might be definite. If the depreciation of the paper money should be prolonged for any length of time it would not be easy to again establish the primitive value of the gold coinage.

It might also be stipulated in the convention for a monetary union that all the American Republics should renounce their right to issue inconvertible notes or the right to adopt a paper régime. This would be an agreement difficult to fulfill, even if it were so stipulated in a contract, as at any time a critical economical situation might occur in any one of the contracting Republics, and a return to the inconvertible paper money would be difficult to avoid, such, for instance, as a declaration of war. The Austro-German monetary union contained a clause prohibiting any one of the contracting parties to issue obligatory paper currency. Notwithstanding this prohibition the Austrian Government soon found itself obliged to return to a paper money régime, and was obliged to remain in this situation during the whole period of the agreement.

Paper money is, in consequence, the most serious danger threatening an American monetary union.

Just as the monetary standards of the American Republics with a common origin from the Spanish peso have varied afterwards through the effects caused by paper money, in a like manner they might vary again after the adoption of a common monetary unit by all the American Republics.

Mere promises or agreements between the different contracting parties do not give sufficient surety to avoid the danger of the issue of paper money.

For this reason these kinds of monetary unions can only be free from the danger of paper money in such confederations or groups of States as have one common executive and legislative power. If some day this should occur in America, then the way would be clear to carry out this ideal. Meanwhile, this is not the practical case we desire to solve.

I have already explained the many difficulties to be surmounted in the adoption of a common monetary unit for America; and I think I have shown the nature of these same difficulties.

I then explained that even after these difficulties had been overcome, there would still remain serious dangers in the future; which I consider I have also demonstrated. The danger of a return to paper money is in itself of sufficient importance to justify my using the adjective "serious."

To conclude my subject I will just point out the very few advantages that would accrue from the adoption of a reform so full of difficulties and dangers and that it would be sufficient to procure a relative stability of international exchange, fixing a gold standard or a gold exchange standard for paper currency.

Among countries having a gold standard the international exchange is more or less stable and can only fluctuate within the narrow limits of the "gold point." The stability of international exchange is really the great desideratum to facilitate business.

The greater part of international payments are effected by means of drafts, therefore it matters very little to the person obliged to make payments in a foreign country whether the money in which he makes his payment is of the same type as that of his own country or of a different one.

A Frenchman making a payment of £1,000 to an Englishman procures a draft for that amount, paying for it, say, 25,050 francs, or perhaps 25,250 francs, according to the rate of international exchange quoted at the time he purchases his draft. What advantage would there be for this Frenchman if there had been a common standard of money in both countries? If such had been the case, our Frenchman would have had to purchase his draft for 25,221 francs in place of £1,000, this being the exact equivalent of the latter sum. For this draft he would not have paid exactly the said sum of 25,221 francs, but just a little more or less, according to the type of international exchange quoted at the moment he purchased his draft; that is to say, he might have had to pay 25.050 or 25,250 francs, as in the present case.

In consequence the Frenchman would have had no benefit by the circulation in England of francs in place of pounds sterling.

The question of two countries having the same type of currency—for example, the same peso or the same franc—does not signify that international exchange will remain invariable. Even if they had the same money standard there would still exist the fluctuations of exchange caused by the expenses incurred during the transfer of the money from one market to another. For example, there are fluctuations of international exchange between Switzerland and Paris, although both countries have the franc as a common unit. If in Chile we had a gold peso of the same value as the United States dollar we would still have fluctuation of exchange within the limits of the "gold point."

The only manifest advantage we can see in the adoption of a common type of money for America would be for travelers going from one Republic to another, as they would find in all of them the same monetary system, and so save themselves the trouble of using a different kind of money. When I was in Rio de Janeiro for the first time a waiter in the restaurant presented me with a bill for some thousands of reis for a frugal lunch, and I thought I was being defrauded. These few advantages for travelers are not of sufficient importance to justify a reform requiring such great efforts and exposed to so many dangers.

Finally, it would be sufficient for the present to procure a stable international exchange, which could be done if the different American Republics adopted a gold standard or, in the impossibility of doing this, a gold-exchange standard.

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The CHAIRMAN. Gentlemen, the evening is so far advanced, it now being 6 o'clock, that I am afraid we will have to conclude the session of to-day. I should like to call the attention of the committee of which Mr. Casasus is chairman to the fact that the resolutions to which I referred this morning will be referred to that committee, and that in my absence Mr. Gonzales has kindly consented to serve on the committee with Mr. Casasus and Mr. Philippi to perfect the resolution.

I now declare the afternoon session of this section adjourned, to reconvene to-morrow morning at 9.30.

GENERAL SESSION OF SECTION IX.

New Willard Hotel,
Tuesday morning, January 4, 1916.

Honorary Chairman, Federico A. Pezet.
Chairman, S. N. D. North.

The session was called to order at 10 o'clock by Chairman North.

Mr. North. In the absence of Dr. Rowe, who is the chairman of this section, and who is still ill, I regret to say, it becomes my duty to call this section meeting to order. I have great pleasure in introducing to you as the honorary chairman of the session His Excellency Federico A. Pezet, minister from Peru. We will be greatly obliged to him if he will just say a word.

Minister Pezet. Ladies and gentlemen, in the first instance, I beg leave to say that it is a great honor to be selected as honorary chairman of a section of the conference, and I regret very much the absence of Prof. Rowe, who has given so much of his life and of his intelligence to Latin-American countries, and more especially to the bringing together in closer ties of the North and South American people.

The papers that are to be read to-day are on most interesting subjects. I will now call on Prof. Clinton D. Smith, of Rio de Janeiro, who is to give a résumé of the paper of Dr. Pedro Souto Maior, of Brazil, on the subject of "Inland waterways."

A NAVEGAÇÃO INTERIOR DO BRASIL.

Por PEDRO SOUTO MAIOR,
Socio effectivo do Instituto Historico e Geographico Brasileiro.

As navegações maritimas nos seculos 15 e 16 tornaram gloriosas as duas nações ibericas, grangeando-lhes vastos imperios coloniaes.

Foi por meio dos rios da America do Sul que os destemidos Castelhanos e Lusitanos exploraram e conquistaram o dilatado continente.

"Os caminhos que andam" foram utilisados como meio de transporte, desde as épocas mais remotas na China, na India, no Egypto e em outros paizes, e na America serviram para a exploração e povoação do interior do continente.

Na America do Norte e na Europa não somente exploram completamente esse meio de transportes como tambem abrem milhares de kilometros de canaes artificiaes.

A China não fica atraz, nesse ponto, da civilisação européa, pois alem de utilisar-se da navegação de seus rios, possue uma rêde extraordinaria de canaes, emque empregam as eclusas, tendo sido os Chinezes os primeiros a empregar os planos inclinados.

E' admiravel a narração de Marco Polo da sua viagem á China no seculo 13; mas o que se encontra ahi de mais interessante é a descripção da navegação dos rios e canaes.

PLANOS DE VIAÇÃO PAN-AMERICANA.

O monroismo não tem nos seus principios idéa alguma hostil contra a Europa, é antes um desejo ardente e digno de confraternização; é a aspiração muito justa que deve nutrir todo americano de ver o seu continente, extincta a ultima colonia entrar como igual na alliança de sua ex-metropole.

E porque não?

Já existem varias nações cultas no nosso continente. Por acaso New York.

Rio de Janeiro, Buenos Ayres, Santiago, etc., não rivalism em progresso e civilização com as capitaes de Europa?

Na Historia vemos muitos casos de colonias excederem as suas metropoles: vemos Carthago sobrepujar a Phenicia em poderio; Troya luctar contra toda a Grecia; e actualmente a União Norte Americana apresentar-se como primeira potencia no concerto universal.

E, de mais, dizem:—a civilização marcha para o oeste.

Para realisarmos esse ideal precisamos antes conseguir a confraternização e a união de todos os paizes americanos e para tal fim muito concorrerão as communicações faceis, os bons meios de transportes, entre os quaes, se deve contar—o aproveitamento da rêde infinita dos rios sul-americanos.

Foi por isso muito applaudido no Congresso Pan-Americano o grandioso projecto do representante Reyes da ligacão por agua dos rios Amazonas e Prata, aproveitando-se tambem a que já existe entre o Amazonas e o Orenoco pelo Cassiquiare, obra phenomenal da natureza.

Por esse grandioso projecto ficariam unidas as tres principaes bacias fluviaes da America do Sul.

A ligação do Amazonas ao Prata primeiro ideada por Luiz Pinto de Souza Coutinho, capitão-mór de Matto Grosso e que tem merecido a attenção de alguns Brasileiros, especialmente do Brigadeiro Eduardo José de Moraes ha de se fazer pelos rios Alegre e Agnapehy, e exige, portanto, a canalização do Madeira para a sua realisação.

Além da grande importancia continental dessa empresa, seria ella de toda a vantagem para o Brasil, o qual ganharia uma navegação ininterrupta de milhares de kilometros, que iria desenvolver essas regiões longinquas e actualmente desertas.

A fim de se tratar do assumpto convocou-se um congressó o dos paizes interessados, que já se devia ter reunido no Rio de Janeiro.

Um outro plano de viação, mas este mixto, consistindo de navegação e um curto ferro carril, é o Paraná-Prata.

Tem o Paraná, contado desde as cabeceiras do rio Grande, 4,390 Kil. dos quaes 1,871 no territorio brasileiro.

A sua navegação do Prata para cima é interrompida pelo Salto das Se7 Quedas.

Do montante desse salto ao jusante da cachoeira de Urubu-punga torna-se francamente navegavel por uns 600 Kilometros.

Ligadas essas duas secções por uma estrada marginal no Salto das Sete Quedas poder-se-hão Communicar por esse meio as Republicas do Paraguay, Argentina e Uruguay com os Estados brasileiros do Paraná, S. Paulo, Matto Grosse e Minas Geraes, já estando ligado o rio Paraná, nas visinhanças de Urubúpungá pela estrada de ferro que vae de S. Paulo a Corumbá em Matto Grosso.

Estabelecendo-se um varadouro entre os rios Ivinheima e Miranda, obter-se-ha ainda uma communicação economica no sul de Matto Grosso, entre o Paraná e Paraguay.

Varios paizes podem-se ligar ao Brasil por affluentes do Amazonas.

A Guyana hollandeza pelo Trombetas.

A Guyana ingleza pelo rio Branco.

A Colombia pelo Içá e o Japurá, e ligados esses rios ao Magdalena por uma estrada de ferro, ficarão unidas as bacias Magdalena e Amazonas.

A Republica do Equador e o Perú pelo rio Napo.

A Republica do Perú alem do Javary e o proprio Amazonas, pelo Madre de Dios.

A Bolivia pelos affluentes do Madeira.

O Equador e o Perú poderão formar caminhos interoceanicos, servindo de tronco o Amazonas, o primeiro pela construcção de uma ferro-via de Guyaquil ao Napo e o segundo pela estrada que se dirige ao Ucayalle.

A NAVEGAÇÃO FLUVIAL DO BRASIL.

Varios escriptores brasileiros tem tratado dos rios do paiz sob diversos aspectos.

Eduardo José de Moraes occupou-se da ligação de algumas bacias.

Tristão Francklin e o Dr. Marcos de Macedo queriam ligar por um canal o rio S. Francisco com o Jaguaribe no Ceará, a fim de levar agua áquellas regiões seccas.

Joaquim Silverio de Castro Barbosa cogitou de aproveitar os cursos d'agua para irrigação e as cachoeiras para força motriz.

Trabalho precioso sobre a irrigação no nosso paiz, é o da lavra de Joanny Bouchardet—O Problema do Norte—sua solução.

Estando o Brasil muito escassamente povoado nos sertões e não havendo navegação regular ou nenhuma em alguns rios, devido á presença de cachoeiras, só conheciamos dos seus cursos o que nos informaram os exploradores.

E' verdade que já pouco resta a esclarecer sobre esse assumpto, graças aos arrojados viajantes brasileiros e extrangeiros que os navegaram.

O ultimo foi o illustre Americano o Sr. Coronel Th. Roosevelt que explorou o que se patenteou como o maior affl. do rio Madeira, com 1,500 Kil. e conhecido hoje pelo nome do seu descobridor.

Este succinto estudo trata apenas da navegação fluvial do paiz.

Até hoje o meio predilecto de transportes no Brasil, o unico pelo qual a maioria se esforça é o caminho de ferro.

Pouco interesse se presta ás estradas de rodagem, canaes ou rios, precisando de melhoramentos.

Não ha sequer a lembrança de que uma das maiores riquezas do paiz é a existencia desses tropeços nos rios, as cachoeiras, por cujo motivo não é tentada a navegação.

A anthracite póde esgotar-se no futuro, mas, nas quedas d'agua daquelles rios encontrar-se-ha uma outra hulha, depositos perennes de força motriz para todas as industrias.

Entretanto o transporte por agua tem suas vantagens, sendo uma dellas a economia, pois geralmente se calcula em 30% a differença do frete pelas estradas de ferro; e é tão pratico e conveniente, que na America do Norte e na Europa não sómente se aproveitam para esse fim os rios, como se constroem canaes.

Póde-se dizer que foram os Americanos os inventores do systema de navegação com barcos de pequeno calado.

Ao prepararem rios de pouca agua e canaes estreitos resolveram abandonar, por economia, o antigo systema de aprofundar e alargar os canaes para a passagem de barcos de maior calado, a helice ou de rodas ao lado.

Para aproveitarem taes cursos de agua inventaram os barcos de fundo de prato e de roda á popa.

Ha bastantes annos desde 1887, que me interesso pelo aproveitamento dos rios navegaveis em grandes trechos no interior e que não são utilisados pela civilisação, devido a obstaculos superaveis pela sciencia.

Como ex-concessionairo da navegação do rio Madeira, fallarei em primeiro logar e mais estensamente daquelle rio.

Obtive do Governo Brasileiro pelo decreto nº 4407 de 12 de Maio de 1902 o privilegio da navegação do trecho encachoeirado do rio Madeira, isto é, desde a primeira cachoeira, Stº Antonio, até á foz do rio Beni, que fica a 10° 20′ Lat. S.

Esse trecho tem de extensão 357 Kilometros.

Da confluencia do rio Beni com o Mamoré para baixo é que começa o rio Madeira.

Este offerece navegação franca de Stº Antonio até a sua foz no Amazonas, no percurso de 901 Kilometros, que addicionados aos 357 do trecho encachoeirado, vem a formar um curso total de 1258 Kilometros.

O Mamoré recebe as aguas do rio Guaporé que em grande extensão serve de limite entre o Estado de Matto Grosso e a Republica da Bolivia.

O Beni por sua vez recebe o Madre de Dios e o Orton que correm na fronteira boliviana perto do Estado do Amazonas.

Todos os quatro com seus innumeros affluentes formam uma rêde de viação fluvial que o segundo o General Pando, deve montar a uns 10 mil kilometros de navegação para barcos de pequeno calado.

Para conseguir-se esse desideratum seria preciso antes de tudo preparar para uma navegação regular o trecho encachoeirado do rio Madeira e mais as cinco cachoeiras—Lages, Páu Grande, Bananeiras, Guajará—Guassú e Guajará-Mirim que se seguem no rio Mamoré, isto é, mais 67 Kilometros nesse rio.

Deve-se attribuir á Serra Geral a formação das cachoeiras do rio Madeira, e das dos affluentes da margem direita do Amazonas a leste do Madeira até o Tocantins; assim vemos que o rio Purús não tem cachoeiras até proximo de suas cabeceiras.

Toda a região cisandina pertencente ao Perú e á Bolivia desde 12° de Lat. S. até 19° S., abrangendo portanto uma zona de 7 gráus vem a ser, logo que haja uma communicação regular na secção encachoeirada do Madeira e do Mamoré, tributaria do rio Madeira.

Essa região tem uma população de 2 milhões de habitantes.

O rio Madeira desde o seu inicio segue, com pequenas variantes até um pouco acima da cachoeira Araras, um rumo Norte, dahi se desvia para noroeste até a foz do rio Abunã, depois corre para nordeste até a cachoeira de Pederneiras, deste ponto corre para leste até a confluencia do rio Mutum Paraná e então continuá sempre na direcção nordeste até a sua foz no Amazonas.

E′ muito menos sinuoso que o Purús.

Em Outubro começa o degelo dos Andes e principiam as chuvas no Madeira e Mamoré.

Em Novembro já está estabelecida a enchente do rio, a qual em Fevereiro chega a elevar-se ao maximo, 14 metros em Stº Antonio.

Em Abril desapparecem as chuvas.

A vasante dura pelos mezes de Maio, Junho e Julho.

Essas enchentes alteram, augmentando em extensão a navigabilidade do Amazonas e seus affluentes e formam novos canaes, furos, lagôas, etc.; assim é que se calcula em 50,000 kilometros a navegação do Amazonas e avalia-se pelo dobro nas enchentes.

PRODUCÇÕES DA REGIÃO TRIBUTARIA.

Os productos da flora boliviana são variadissimos e pertencem ás duas zonas, torrida e temperada.

Toda a região banhada pelos affluentes do Madeira dá os productos da zona torrida o cacau, a baunilha, o algodão, a canna de assucar, o fumo, o café, a borracha, milho, arroz, etc.; nas encostas dos Andes e nos planaltos entre as cordilheiras, devido aos effeitos da altitude os productos são da zona temperada, a uva, os cereaes, etc.

Ha mais os productos proprios da região andina, a coca, a quina, etc.

A maior parte desses productos são sylvestres.

A lavoura do valle Madeirense é muito acanhada por falta de communicações faceis; pois não podendo ter consumidores para os seus productos só plantam o necessario para si.

No Departamento do Beni ha muita creação de gado bovino, que poderá mais tarde abastecer aos mercados do Amazonas, onde o Kilo de carne custa 2$000 rs.

Affirma-se que matam alli muitas vezes um boi simplesmente para o aproveitamento do couro no enfardamento de mercadorias.

Convem aqui notar que as cargas destinadas a transitar pelo alto Madeira, já vem, quer da Europa, quer da Bolivia acondicionadas em volumes portateis para facilitar as varias baldeações nas cachoeiras.

Da-se tambem esse facto na alta Bolivia no transporte de cargas por tropilhas de Llamas.

MADEIRAS.

Ha duas riquezas naturaes no Brasil, que ainda estão por assim dizer inexploradas: a mineração e as madeiras.

A mineração precisa de leis adequadas para que se desenvolva.

As madeiras, porem, estão ahi promptas, exigindo apenas do homem algum trabalho em abater as arvores.

O Brasil acha-se coberto em grandes extensões por florestas.

Ha um senão nessa industria quanto ao litoral do paiz.

O transporte das madeiras deve ser feito por motivos economicos por agua, isto é, pelos rios em cujas margens forem cortadas e pelos quaes descem em forma de balsa.

Do rio Parahyba do Sul até o Chuy não ha um rio sequer de alguma importancia quanto ao curso; pois devido a disposição orographica da região as aguas correm para o Paraná.

Do Parahyba do Sul ao S. Francisco varios rios caudalosos desembocam no Atlantico e é essa secção do litoral a que está em melhores condições para tal commercio.

De Alagôas para o Norte só o Maranhão apresenta algumas vantagens, por faltarem aos outros Estados rios importantes que desaguem no Atlantico e corram por entre mattas.

Como isso differe quanto ao valle do Amazonas! Lá existe um deposito incalculavel de madeiras e lá se estende a rêde fluvial do Amazonas para transportal-as.

Que exhuberancia na flora daquella opulentissima região!

Conforme ponderou Maury, numa parte do anno os ventos de Nordeste e noutro os de Sudeste carregam as evaporações do Atalantico e vem espargil-as em forma de chuvas sobre o interior do nosso continente, suavisando os ardores do clima e vivificando a sua flora.

Por outro lado o degelo dos Andes desde o equador até 19° Lat. Sul. vem engrossar as aguas de todos os tributarios do rio-mar, dalli procedentes, enche-os, fal-os transbordar, cobrindo grandes superficies de terra e ahi produzindo com o calor a prodigiosa pompa vegetal.

Na enchente as impetuosas torrentes vão aluindo as margens do rio, derrubando as arvores que encontram, entregando-as ás correntezas, pelas quaes são arrastadas em viagem forçada para o desconhecido.

Só se detem na sua jornada nas cachoeiras do Madeira. E' na cachoeira do Madeira e no Salto Theotonio que devido ás circumstancias topographicas caem nos remansos emaranhadas umas ás outras, formando assim ilhas de troncos.

Logo abaixo do Salto Theotonio ha um verdadeiro, thezouro nesse genero—uma ilha de troncos de cedro.

Considerando-se que ao pé desses depositos de madeira se encontra a força motriz para o emprego das serras e que lá está o rio para transportal-a a um porto, podemos imaginar qual não será, no futuro, a actividade commercial e industrial quanto a esse producto.

As madeiras poderão mesmo descer pelo rio em forma de jangadas até um porto donde sejam remettidas directamente para Europa e Norte America.

A respeito desse producto procurou-me no Rio de Janeiro, quando esteve na nossa capital, o Sr. Frank W. Bickned, agente especial do ministerio da Agricultura dos Estados Unidos da America do Norte.

Esse cavalheiro numa conferencia que tivemos me forneceu informações interessantes sobre tal assumpto.

Pelo enorme desenvolvimento no consumo pelas construcções de carpintaria, marinha, engenharia, fabrico de moveis e outras industrias, a madeira escasseia hoje em Norte America.

Já se corta alli o pinho ainda verde, tal é a sua falta.

Os Americanos procuram com anciedade regiões florestaes que lhes possam fornecer as madeiras exigidas pelas necessidades industriaes.

O exhaurimento nessa producção vae-se dando tambem noutros paizes.

E' na Amazonia onde o mundo inteiro se poderá abastecer desse producto por longos annos sem receio de o ver exgotar-se.

Ainda mais, a direcção do curso do Madeira, sempre nordeste, facilita, encurtando o commercio dessa região com a Europa e America do Norte.

O FUTURO DA AMAZONIA.

A industria extractiva e especialmente a borracha será por muito tempo o principal attractivo para a immigração do Amazonas e com seus pingues lucros deixará em olvido a lavoura naquellas terras uberrimas.

Ha certa analogia entre a Amazonia e a California do periodo da febre do ouro.

Aqui todas as vistas estão voltadas para a extracção da gomma elastica, alli só se cuidava em descobrir as minas do metal precioso. Todos os generos essenciaes a vida eram carissimos lá como o são aqui.

Naturalmente acontecerá cá o mesmo que na California.

Os primeiros agricultores e criadores que se estabelecerem farão fortunas iguaes ás dos seringueiros, tal é a carestia de todos os generos alimenticios e mercadorias no Amazonas.

Esse exemplo fará augmentar a classe dos agricultores, e afinal a lavoura supplantará a borracha, assim como na California suplantou o ouro.

Actualmente o commercio do Pará, o regatão absorve a maior parte dos lucros do trabalho do seringueiro.

Com o corte da lenha nas margens dos rios, com a derrubada das arvores para a exportação de madeiras e ainda mais com a drenagem dos terrenos alagadiços, necessaria para as plantações irá cada vez mais se saneando aquella região.

E chegará o dia em que essa terra portentosamente uberrima, esse Eden tão decantado por Maury, Agassis e Humboldt realisará os seus sonhos, virá a ser o celeiro do mundo, o futuro centro da civilisação mundial.

FUNDAÇÃO DE UMA CIDADE NO SALTO THEOTONIO.

O Salto Theotonio apresenta, subindo o rio, o primeiro obstaculo insuperavel, pelos meios ordinarios, á navegação do Alto Medeira.

A cachoeira de Santo Antonio é franqueavel por vapor na enchente e aguas medias e melhorando-se o canal da margem direita offerecerá passagem todo anno.

O nome do Salto foi-lhe dado em homenagem ao Dr. Theotonio de Gusmão, irmão do celebre Bartholomeu de Gusmão, inventor de um aerostato dirigivel, com que chegou a fazer experiencias em Lisbôa.

Aquelle doutor paladino da navegação do Madeira lá se estabeleceu com a familia e fundou um povoado com o intuito de offerecer recursos aos viajantes, na passagem das cachoeiras.

Haveria grande conveniencia em se realizar a idea do esclarecido e abnegado doutor.

O sitio apresenta explendidas vantagens.

As margens do rio alli se elevam de 30 a 50 metros garantindo com essa altitude bôas condições de salubridade.

Logo ao jusante do Salto á margem direita um ribeiro despeja as suas aguas limpidas fornecendo agua potavel e facil desembarque.

Nos remansos abaixo o rio é tão piscoso que se póde pescar até com harpão.

Ha naquelle ponto abundancia de madeira.

A todas essas vantagens accrescentaremos a utilização da força motriz do salto para todas as necessidades da futura cidade.

CACHOEIRAS DO RIO MADEIRA.

As quédas verticaes das cachoeiras, juntamente com o comprimento das mesmas se acha na tabella seguinte (para a altura das aguas médias).—*Estudos de Keller.*

Denominação das cachoeiras.	Quéda.	Comprimento.
	Metros.	*Metros.*
1. Madeira	2.5	900
2. Misericordia	0.6	100
Queda principal	4.1	400
1ª correnteza abaixo do Salto	1.5	275
3. Ribeirão 2ª correnteza abaixo do Salto	2.7	1,000
3ª correnteza abaixo do Salto	0.9	250
4ª correnteza abaixo do Salto	1.5	900
4. Periquitos	0.8	300
5. Araras	1.4	700
Araras, correnteza abaixo della	0.5	250
6. Pederneira	1.1	250
Pederneira, correnteza abaixo della	1.9	350
7. Paredão	1.7	350
1ª correnteza abaixo della	1.5	750
2ª correnteza abaixo della	1.2	700
3ª correnteza abaixo della	0.5	250

Denominação das cachoeiras.	Quéda.	Comprimento.
	Metros.	*Metros.*
8. Tres Irmãos	0.6	150
Correnteza abaixo delles	0.5	70
Do	0.5	150
Do	0.7	200
9. Girão, Salto principal	8.0	700
Girão, correnteza abaixo do mesmo	0.8	200
Do	0.6	200
10. Caldeirão do Inferno	2.2	400
1.ª correnteza abaixo	1.9	1,170
2.ª correnteza abaixo	0.7	250
3.ª correnteza abaixo	0.4	150
4.ª correnteza abaixo	0.5	300
5.ª correnteza abaixo	0.3	120
11. Morrinhos	1.1	450
Do	0.3	120
Do	0.4	100
Do	0.6	250
Do	0.3	60
Do	0.7	150
12. Salto Theotonio	7.5	300
Do	0.3	300
Do	0.45	150
13. Santo Antonio	1.2	300

AS CACHOEIRAS.

As cachoeiras segundo as difficuldades que apresentam á navegação, são entre nós denominadas: saltos, cachoeiras e corredeiras ou correntezas.

Os saltos são aquellas em que ha maior differença de nivel, grande queda vertical em pequeno percurso; cachoeiras são as que tem a differença de nivel destribuida por maior extensão do rio; e finalmente na corredeira a pequena differença de nivel ainda é mais atenuada por uma grande extensão do rio.

Torna-se evidente que para estabelecer-se a navegação em um salto precisa-se fazer obras mais ou menos importantes conforme as condições topographicas; o valor dessas obras diminuem nas cachoeiras e ainda mais nas correntezas, as quaes deixam de existir, umas na enchente, outras na vasante.

Quando a cachoeira consiste de mais de uma queda, costumam dar os nomes de cabeça, corpo e rabo para destinguir as varias secções. Geralmente a difficuldade em vencer a cachoeira é sómente numa dessas secções por ser ahi maior a quéda vertical.

Além da sirga para a passagem nas correntesas e cachoeiras superaveis, usam alli, para a passagem dos saltos, como em outros rios do Brasil *vararem* as canôas, isto é, arrastarem-nas á margem do rio de um para outro, dos portos de jusante e montante.

Essas canôas não rolam, mas sim resvalam por cima de troncos e galhos de arvores abatidas na occasião e que estando cheias de seiva facilitam a operação. No rio Tapajós no varadouro do Salto Augusto o processo é mais aperfeiçoado, collocam a canôa sobre rodas.

Estudos e Projecto Keller.

PLANOS INCLINADOS.

Em varias epocas se fizeram alguns estudos e descripções da secção encachoeirada do rio Madeira.

Entre os que se destinguiram devemos recordar Ricardo Francos de Almeida Serra, Silva Coutinho, João Severiano da Fonseca, os engenheiros Keller, etc.

Os unicos, porem, que estudaram o rio para o estabelecimento de uma navegação regular foram os dous engenheiros Keller especialistas em navegação de

rios e canaes e como taes tinham sido antes incumbidos pelo nosso Governo, de estudos nos rios Iguassú, Ivahy, Paranapanema, Paraná, Parahyba e Pomba.

Estudaram cada uma das cachoeiras e levantaram uma planta do rio.

Depois de formularem diversos projectos de melhoramentos, se declararam pelo emprego de planos inclinados.

Eis o que dizem no seu relatorio:

"Entre todos os projectos aquelle que trata de ligar a navegação do baixo Madeira á do Mamoré por meio de uma navegação com barcos pequenos e transpondo as cachoeiras por meio de planos inclinados, ou mortonas, é o que offerece as maiores vantagens.

"Podendo os mesmos barcos, que navegam entre as cachoeiras ser rebocados pelos vapores acima e abaixo das mesmas não ha baldeação alguma."

Muitos dos partidarios da navegação não apresentavam um meio exclusivo para a sua realisação.

D'Orbigny, porem, opinava pelos canaes lateraes com eclusas.

Eduardo José de Moraes tinha a mesma opinião.

Declarou-se do mesmo modo por esse systema em artigos no Jornal do Commercio o Coronel de Engenheiros Manoel Gonçalves Campello França.

Os planos inclinados, no emtanto, devem ser preferidos em alguns casos, já por ser menos dispendiosa a sua construcção, já por não se gastar tanto tempo na passagem dos barcos.

Quando ha mais differença de nivel, precisa-se não de uma, nem duas, mas sim de uma serie de eclusas, que exigem muito tempo para a passagem dos barcos, alem de consumir grande capital na sua construcção.

Essas vantagens dos planos inclinados sobre as eclusas são reconhecidas por alguns autores.

Eis o que diz William Macquorn Rankine, tratando dos diversos systemas de planos inclinados: "To save the time and water expended in shifting boats from one level to another by means of locks, inclined planes are used on some canals."

No periodico Scientific American de 15 de Novembro de 1902 encontra-se uma descripção do canal Morris na America do Norte.

Esse canal começa no rio Delaware, passa em Newarte e termina em Jersey City no Estado de Nova Jersey.

Tem de estensão 102 milhas.

Os barcos são divididos em dous, que facilmente se unem, e cada um carrega 45 toneladas.

Nesse canal é empregado exclusivamente planos inclinados para vencer differenças de nivel.

O plano mais notavel é o que está perto de Washington em Nova Jersey, o qual sobe 100 pés em 1600 de estensão.

Em outro numero do mesmo periodico, o do dia 3 de Setembro de 1904, vem um artigo sobre um grande melhoramento no systema de planos inclinados, feito pelo Sr. Gordon Gale Thomas, engenheiro em chefe do Grand Junction Canal e seu imão James em Foxton, condado de Leicester, na Inglaterra.

A construcção e installação foi entregue á firma dos Srs. Givinne, de Hammersmith, Londres, que são os autores desse artigo.

Deixo de dar a descripção de todo o processo, que pode ser lido naquelle periodico, extrahindo dahi apenas a noticia dos felizes resultados obtidos com esse melhoramento.

Diz o missivista:

"Para evitar as grandes demoras na passagem das eclusas foi inventado um novo systema de communicação pelos Srs. Gordon e James B. Thomas da Inglaterra, e está já funccionando em Foxton, Condado de Leicester. O fim

desta invenção é abolir completamente as eclusas e empregar meios mecanicos para fazer subir e descer os barcos de um para outro plano."

Eis aqui a conclusão do artigo:

"A economia de tempo é muito importante. Em vez de gastar-se 1¼ hora na passagem de um barco, como antes se fazia pela escada de 10 eclusas, um barco póde ser transportado de um nivel no outro em 12 minutos.

"Facilmente se póde imaginar que nessas condições muito maior tonelagem póde-se passar por este systema do que pelo anterior. Tomando 15 minutos de intervallo entre as operações, 6,000 toneladas—toneladas—3.000 para cima e outras tantas para baixo podem-se transportar no trabalho diario de 12 horas.

O custo deste serviço nessas condições tem regulado em $610 por dia, incluindo-se nessa quantidade carvão, azeite e serviço".

Dahi se conclue além da economia, a grande capacidade de trafego inherente ao systema escolhido.

Do relatorio do Consul Geral dos Estados Unidos no Rio de Janeiro, o Sr. Eugene Seeger publicado no Jornal do Commercio de 21 de Outubro de 1902 extrahimos o seguinte da sua referencia ao privilegio de navegação do Alto Madeira:

"A navegação no Amazonas é livre até Tabatinga (cidade brasileira nos limites com o Perú) e no seu affluente, o Madeira, até a fronteira da Bolivia, o Dr. Souto Maior tem o privilegio exclusivo de navegação e o direito de cobrar passagem aos barcos estranhos e na Bolivia a navegação é livre em toda a parte. Por ahi se evidencia que o Dr. Souto Maior domina uma posição estrategica de grande importancia no commercio externo da Bolivia.

Transmitti com este um esboço do rio Madeira e das cataratas, e posso arranjar facilmente todas as informações minuciosas desejadas pelas pessoas que tiverem interesse neste assumpto.

Disse o Snr. Lauro Müller, actual Ministro de Estrangeiros, no seu relatorio de 1903, quando Ministro da Viação:

"Levados a effeito taes melhoramentos, desapparecerá a selução de continuidade na navegação dos rios Madre de Dios, Beni e Madeira, sendo que este, da cachoeira de Sto Antonio até Belem, no Estado do Pará, é navegado, ha alguns annos, por vapores da Amazon Steam Navigation Company.

São cerca de 55 leguas do rio Madeira que se pretende tornar navegaveis por vapor, e que darão sahida facil á producção da Republica da Bolivia pelo Amazonas.

Muito fôra para desejar se extendesse o melhoramento do Madeira até Guajará-Mirim, limite superior da parte encachoeirada, afim de se poder aproveitar a navegação livre do Guaporé até Matto Grosso.

Por esta forma ficaria estabelecida uma linha fluvial de 813 leguas de extensão, ligando ao oceano, não só o interior do nosso longinquo Estado de Matto Grosso como o da Republica da Bolivia.

Vantagens da Navegação Sobre a Estrada de Ferro.

Tornam-se evidentes as seguintes vantagens sobre uma ferro-via naquella região:

1—Menor custo na construcção.

2—Frete muito mais barato.

3—Prazo menor para a preparo do rio.

4—Nenhuma baldeação para a carga.

A segunda vantagem, consequencia da primeira, é sempre verificada quando por imprudencia se constróe uma estrada de ferro á margem de um rio susceptivel de navegação.

A concurrencia feita pelo transporte fluvial é muito prejudicial ao terrestre.

Esse facto parece estar-se manifestando com a "Estrada Madeira Mamoré", devido aos habitantes daquella zona preferirem mandar os seus productos pelo rio, apezar das cachoeiras. (Vide—Brasil Ferro Carril—de 15 de Setembro de 1915.)

Melhoramentos nos Rios para uma Navegação Economica.

Os rios tem representado importante papel na exploração e povoamento do interior da America do Sul.

O Brasil possue vasta rêde fluvial, mas não a tem convenientemente aproveitado.

Varios Paizes da Europa e os Estados Unidos, alem das ferro-vias, utilisam-se dos rios e constróem canaes como meio de transporte.

Entretanto muita gente adiantada prefere fazer uma estrada de ferro marginal a melhorar ou preparar um rio para a navegação.

É condemnado como inutil o rio, quando não é francamente navegavel.

O querer tudo ou nada, como pensam alguns, ou por outra—desprezar o bom—a navegação fluvial por não conseguir o optimo—a ferro-via, é absurdo.

Entretanto as margens dos rios mais do que as ferrovias devem attrahir os colonos, pois alem do transporte barato, lá encontram o essencial á vida—a agua, o alimento pela pescaria ou caça, a lenha, etc.

Mas a verdade é que exceptuando em alguns rios grandes a navegação no estado natural é quasi sempre impossivel.

Disse o Sr. Walter Hammond, engenheiro chefe da E. F. Paulista no seu relatorio em 1886:

"O Sena, o Rheno, o Rhodano, o Danubio, na Europa, o Alleghany, o Ohio, nos Estados Unidos, entre muitos e muitos outros, só foram navegaveis depois do trabalho de desobstrucção, e conservação da agua por meio de represas, e outros meios indicados pela sciencia."

Os Norte Americanos inventaram um systema economico de navegação interior, por meio de barcos de fundo chato, perfeitamente adaptavel á do continente Sul-Americano, onde muitos rios volumosos tornam-se rasos em alguns pontos.

Juntando-se ao uso desses barcos o emprego de planos inclinados para vencer as grandes differenças de nivel, como se vê no Morris Canal e como foram descriptos por Keller, adquirir-se-ha o meio de obter vias aquaticas, satisfazendo ás primeiras necessidades de paizes ainda pouco povoados.

Será muito difficial preparar um rio para uma navegação economica?

Um dos primeiros serviços afim de preparar um rio é livral-o de arvores submersas. Sobre esse assumpto diz o Sr. Walter Hammond:

"O pensamento geral, que a navegação de rios tortuosos com pouca agua, e com muitas cachoeiras e corredeiras, é muito difficultado por arvores boiando, ou submersas nos canaes, é inteiramente sem fundamento, pois o trabalho de desobstrucção dos canaes destes obstaculos é muito insignificante como prova o seguinte:

"N'um trecho do rio Mogyguassú de 90 kilometros na parte denominada 'Pantanaes' o leito foi completamente desobstruido por uma turma de 10 homens, em 7 semanas, de todas as arvores e outras obstrucções semelhantes; accumulações de todos os seculos passados!".

Depois de feitos os estudos nas corredeiras, cachoeiras e saltos, denominação dada pelos nossos ás cachoeiras, conforme a proporção da queda vertical e da extensão das mesmas é que se póde dizer qual o melhoramento a applicar em cada um desses obstaculos á navegação.

Geralmente nas duas primeiras classes o que se deve fazer é rectificar o canal desobstruindo, aprofundando, alargando, ou represando e avolumando as aguas para o canal preferido, se ha mais de um, por meio de barragens.

Nessas duas classes tem grande influencia a altura das aguas; umas cachoeiras melhoram na enchente, outras na vasante.

Em muitas corredeiras bastará o vapor e a alagem para vencel-as.

Em certas cachoeiras e nos saltos, geralmente, os meios a empregar são os canaes lateraes com eclusas ou os planos inclinados.

Convem notar que na America do Sul usam desses meios, mas na sua forma primitiva; alam, isto é, puxam por cordas as canôas nas corredeiras; e nos saltos *varam*, ou por outra, arrastam-nas pela margem do rio, o que vem a ser um rudimentar plano inclinado.

No salto Augusto, no Tapajós, puxam os barcos sobre rodas.

Os meios applicados por aquelles navegantes como que indicam o processo a escolher.

Só pode haver duvida, quando se trata de um salto, se deve ser o plano inclinado ou o canal com eclusa.

Considerando-se que as regiões ainda incultas do interior não comportam meios dispendiosos de transporte e sendo mais economico o plano inclinado, parece que este deve ter a preferencia na maioria dos casos.

Nos melhoramentos dos rios encachoeirados dos planaltos, attendendo a falta de recursos do interior do paiz, ainda escassamente povoado, deve-se tratar sómente de facilitar a navegação existente pelo emprego de rebocadores e lanchas e empregar nos saltos os planos inclinados.

Mais tarde poder-se-ha fazer da primeira, por assim dizer, provisoria installação, outra definitiva, ampliando-a com emprego do canal lateral com eclusas, etc, do mesmo modo que nas ferro-vias augmentam a bitola ou as tornam duplas, quando o augmento do trafego assim o exige.

Convem que os rebocadores e lanchas sejam apropriados á navegação em canaes rasos e estreitos e que possam vencer uma velocidade regular nas corredeiras, utilizando-se, quando possivel, da alagem.

Pelo artigo do Dr. Joaquim Tanajura no Jornal do Commercio de 3 de Novembro de 1915 póde-se vêr que os industriaes estabelecidos nos rios Gy-Paraná e Jamary não esperam grandes obros futuras e tem emprehendido por sua conta melhoramentos naquelles rios.

No Jamary a firma Arruda & Irmão formou um plano inclinado com trilhos Decauville para facilitar a varação na cachoeira Samuel a 94 Kil., da foz no Madeira e por esse meio faz o serviço de transportes de cargas e lanchas na terça parte do tempo que se fazia antes.

No rio Candeias, affluente do Jamary o Dr. José de Souza Martins Alvares Affonso, aproveitando um igarapé, abrio um canal entre aquelle rio e o Madeira, poupando 7½ horas de navegação.

Na navegação interior do Brasil em muitos casos ha que distinguir ou dividir os seus cursos nos planaltos, ou nas baixadas.

Os trechos navegaveis podem encontrar-se em ambos, e os encachoeirados na passagem da primeira para a ultima daquellas secções.

Os melhoramentos do rio para ligar as duas secções muitas vezes não exigem grandes capitaes.

De toda a forma não custarão tanto quanto um ferro carril, que é o meio de transportes preferido no paiz.

E' muito commum fallar-se por muitos annos em tal melhoramento, sem nunca chegar o dia da sua execução.

Ha dous casos especiaes em que os partidarios da estrada de férro afinal realisaram o seu ideal.

O primeiro se refere ao rio S. Francisco.

Construiram a estrada de ferro de Piranhas a Jatobá afim de ligar as navegações do baixo ao alto S. Francisco, completamente interrompidas pela cachoeira de Paulo Affonso.

Não ha duvida que para aquelle caso havia indicação do emprego de uma ferro-via.

A obra foi, porem, incompleta, por não alcançar a navegação franca do curso superior, separada de Jatobá por uma pequena secção encachoeirada.

O segundo caso é o do rio Madeira.

Relatorio do Snr. Antonio Prado (pagina 184):

> As importantes obras que a Companhia Paulista está fazendo, exclusivamente a expensas suas, neste rio (Mogy-Guassú), para melhorar-lhe as condições de navegabilidade, depois de haver mandado á Europa e Estados Unidos o seu zeloso engenheiro chefe o Snr. Walter Hammond, afim de estudar a navegação dos rios encachoeirados, mereciam ser examinados pelo Governo Geral, que, como sabeis, mantem commissões procedendo a melhoramentos em outros rios do Imperio.

Para esse fim foi mandado o Engenheiro Benjamim Franklin de Albuquerque Lima, que depois de examinar aquella navegação, escreveu o seguinte:

> De accordo com as ideas mais modernamentes aceitas sobre navegação interior, tem aquelle engenheiro preparado, nas corredeiras, canaes que apresentam, pelo menos, 0,m55 de profundidade na mais rigorosa estiagem, para serem navegados por vapores de fundo de aço roda á pôpa, e calado maximo de 0,42, construidos pela acreditada fabrica de Yarron & comp., de Londres, que tem feito de taes construcções particular especialidade.

Tem consistido o melhoramento das corredeiras, no arrasamento de pedras que obstruiam os canaes, na construcção de barragens e diques longitudinaes que, represando as aguas e encaminhando-as ao canal, garantem 0,m55 de fundo na mais rigorosa estiagem.

A escolha dos canaes tem sido feita com acerto, preferindo-se aquelles que apresentam menor declividade por seu maior desemvolvimento.

No intuito de economisar tempo e material, tem o Sr. Hammond empregado barragens de ferro e madeira.

Uma serie de trilhos dobrados solidamente em angulo recto e mantidos por tiras de ferro a distancia, um do outro, de $1^{m},50$ a $2^{m},00$, recebe na parte anterior pranchões de madeira.

Uma haste que parte da ponta anterior dos trilhos e vae ligar-se á parte superior, junta com segurança os pranchões e os mantem solidamente presos.

Essas barragens, imaginadas pelo Sr. Hammond, são de grande duração e muito economicas para a estrada de ferro Paulista, onde ha sempre em abundancia trilhos velhos.

Para tornar mais segura a subida dos vapores nas corredeiras, adaptou o Sr. Hammond á prôa de cada vapor um guincho, movido pelo vapor da machina, mordendo uma cadéa solta ao longo da corredeira. Quando movido assim, tem o vapor uma velocidade de 3 Kilometros nas mais fortes correntezas.

Desde que não é mais necessaria, é a cadêa lançada ao rio. É como se vê, o meio de navegação a que os francezes chamam *touage*, perfeitamente applicavel ás corredeiras de pouco fundo, e simplificado por dispensar o rebocador especial chamado *toueur* que completa aquelle systema.

A cadêa é fortemente presa, por uma extremidade, á margem do rio ou ao proprio leito e por outra a uma corrente fina que segura uma pequena boia.

Esta extremidade é tomada com um croke e passada ao guincho, que se põe em movimento com o vapor da machina.

Si trata-se de uma corredeira em curva, onde haja duas ou mais cadêas, toma-se a extremidade da segundo antes de lançar na agua a primeira. Essa manobra exige apenas dous homens e faz-se com a maior facilidade.

Quando a corredeira é fraca, o vapor passa-a com sua propria força, e é admiravel não só a docilidade com que obedece aos lemes collocados ambos a ré e movidos simultaneamente, como tambem á facilidade com que elle faz uma volta inteira, girando sobre o seu eixo.

Conhecendo pela leitura do "Engineering-News" e "The Engineer" e por informações e desenhos fornecidos pelos Srs. Yarrow & Comp., os seus vapores de roda á pôpa, tive occasião de verificar agora a excellencia desses barcos.

O que mais, porem, me sorprendeu foi vel-os rebocar tres grandes barcas sem grande esforço da machina e quasi sem prejuizo de velocidade.

O vapor *Conde d'Eu* que desceu comigo até a corredeira da Escaramupa, rebocando tres barcas, marchou com uma velocidade de 14,5 Kilometros por hora na descida e 9,5 na subida.

O reboque fez-se sempre a ré, com um cabo de pouco extensão, o que não impedia que as barcas acompanhassem perfeitamente o movimento do vapor.

Posso, pois, assegurar a V. Exa. que o material fluctuante empregado no Mogy-Guassú pela companhia estrada de ferro Paulista é o que mais modernamente se recommenda para uma bôa navegação fluvial.

Esse material compõe-se de quatro vapores de roda á popa com as dimensões declaradas no mappa annexo, e 16 barcas para carga.

S. Paulo, 12 de Março 1886.

Benjamin Franklin de Albuquerque Lima.

As barcas calam $0^{m},40$ com 14 toneladas de carga e $0^{m},70$ com o dobro.

Eis o que o diz o Sr. Walter Hammond engenheiro chefe da Companhia Paulista:

Entretanto, no caso de encontrar difficuldades que não possam ser vencidas por meio de guincho e correntes, ainda restam os recursos das comportas, ou planos inclinados com trilhos e carretões, para passar as lanchas de uma altura a outra, por meio de cabos de aço, actuados por turbinas; utilizando assim a força d'agua, como é feito no Morris and Essex, canal nos Estados Unidos.

A conveniencia e a economia da navegação fluvial ou os canaes artificiaes estão sendo demonstradas neste momento na Europa onde a rêde de canaes continuá a augmentar na França, Belgica e Hollanda; na Inglaterra, um canal enorme está em construcção, entre Liverpool e Manchester para diminuir as despezas da baldeação e transporte por estrada de ferro, entre aquellas duas ciudades.

Tambem na França a navegabilidade do Sena tem sido sempre melhorada; assim de Paris para o interior onde, ha 25 annos, só tinham accesso barcos de 50 centimetros de calado navegam hoje perfeitamente vapores, calando um metro.

Ora quando vemos que todos estes paizes tem carvão á porta, e muito barato para as locomotivas das suas estradas de ferro, ao passo que o preço de uma tonelada de carvão no interior varia entre 25$000 e 30$000, torna-se intuitiva a urgente necessidade que o Brazil tem em promover a sua navegação fluvial.

Se fôr preciso ainda mais uma prova de alto valor, da apreciação que é dada em outros paizes á navegação fluvial ou por canaes, basta dizer, que nos Estados Unidos e na Russia, onde os rios e canaes estão fechados durante quatro ou cinco mezes todos os annos pelo gelo, é ainda considerado vantajoso navegar os outros sete ou oito mezes, para fazer concurrencia ás estradas de ferro.

LISTA DOS RIOS DO BRASIL COM OS SEUS CURSOS E TRECHOS NAVEGAVEIS, SEGUNDO A ORDEM GEOGRAPHICA.

Na vastissima rêde fluvial do Brasil figura em primeiro logar pela extensão navegavel a bacia do Amazonas.

Offerece o grande rio e seus affluentes navegação livre e constante na extensão de 52,0 0 0 Kils., da foz ao pongo de Manseriche, e em affluentes das embocaduras ás primeiras cachoeiras.

Além de outras companhias existentes e vapores particulares a "Amazon Steam Navigation Company" ficou obrigada pelo contracto de 1 de agosto de 1895 a estabelecer linhas regulares de navegação a vapor nos seguintes rios: no Purús, com o percruso de 1,014 milhas; no Madeira, com o de 650 milhas; no rio Negro, com o de 426 milhas; e no Solimões até Iquitos, no Perú, com 114 milhas de desenvolvimento.

BACIA DO AMAZONAS.

Rios.	Extensão navegavel.	Curso.
Amazonas, no Brasil	3,165 km	5,570
Affluentes á margem direita:		
Javary	300	1,056
Jutahy	700 km	1,200
Juruá (Segundo Chandless)	980 milhas	
Teffé	90	990
Affluentes á margem direita:		
Coary	240	594
Purús (até a forquilha)	1,667 km	3,210
Tem de nav. com os affluentes e lagos	6,000 km	
Madeira		3,240
Seu affluentes I. Roosevelt tem de curso 1.500—O Mamoré e o Guaporé tem de navegação (De guajará Mirim e Villa Bella)	1,584 kil	
Tapajós	278 km	1,992
Affluentes deste Arinos e Juruena com trechos navegaveis Xingu atí Sousel)		1,980
Tocantins (até a cacheira Tapayana-quará)	113 km	2,640
Affluentes á margem direita: Maranhão e deste o Paranan, tendo o ultimo	488	600
Affluente á margem esquerda: Araquaya	1,300	2,627
Affluente principal: Rio das Mortes	800	990
Affluentes á margem esquerda:		
Içá (até Guamés)		2,452
Japurá	900	1,848
Rio Negro (até S. Gabriel)	196 leguas	1,551
Affluentes deste Rio Branco	600 kil	
Trombetas	240 milhas	
Perú	140 km	950
Araquary (até a colonia Pedro II)		

BACIA DO PARANÁ.

Rio Paraná, formado pelos rios Grande e Paranahyba (no Brasil)	600	4,390
Rio Grande (nav. entre a barra do Ribeirão Vermelho e a cach. Bocaina)		1,353
Affluente á margem direita: Rio das Mortes	216	990
Affluentes do Rio Grande a margem esquerda:		
Sapucahy Grande	100	
Rio Verde	180	
Rio Pardo e seu affluente Mogy-Quassu	200	
Rio Paranahyba tem trechos navegaveis		957
Affluentes margem direita:		
Rio Pardo tem trechos navegaveis		495
Ivinheyma (fo mado pelos Brilhante e Vaccaria)	203	203
Affluentes deste Brilhante	213	
Iguatemy	194	396
Rio Paraguayo (no Brasil)	800	2,078
Affluentes á margem direita:		
S potuba	200	350
Jaurú e seu affluentes Aguapehy	200	450
Cabaçal	100	300
Affluentes do Paraguay á margem esquerda:		
Cuyabá (até aquella cidade)	436	832
S. Lourenço mais de	160	561
Taquary	300	858
Mondego desde Nioac até Miranda	180	264
Apa	96	350

BACIA DO PARANÁ—Continuação.

Rios.	Extensão navegavel.	Curso.
Rio Paranahyba tem trechos navegaveis—Continuação.		
Affluentes do Paraná á margem esquerda:		
Tieté	94	1,122
Seu affl. Piracicaba	125	330
Aguapehy tem trechos nav	...	...
Paranapanema	81	900
Seu affl. Tibagy	120	530
Itararé	...	...
Ivahy	146	555
Piquiry, navegavel da foz a corredeira de Nhã Barbara	...	...
Iguaçú	366	1,320
Uruguaya nav, a partir de Garruchos seu affl Iitcuhy nav, a partir de Passo Novo	...	1,500

BACIA DO S. FRANCISCO.

Rio S. Francisco (baixo, 277, alto, 1577)	1,854	3,161
Affluentes do S. Francisco á margem direita:		
Pará	70	277
Paraopeba	66	448
Rio das Velhas	805	1,135
Affluente deste, Parauna	50	...
Jequitahy	20	277
Rio Verde Grand	40	792
Affluentes do S. Francisco á margem esquerda:		
Indayá	79	250
Abaeté	52	237
Paracatú	113	627
Affluentes deste:		
Rio do Somno	66	...
Rio Preto	66	528
Rio da Prata	133	...
Urucuya	132	501
Rio Pardo	79	436
Carinhanha	105	448
Corrente	158	...
Affluentes deste:		
Rio Formozo	40	...
Rio Arrojado	33	...
Rio Grande	363	660
Affluentes deste:		
Rio das Ondas	13	...
Rio Branco	55	...
Rio Preto	211	...

BACIAS ORIENTAES.

Gurupy	300	800
Turyassú	110	...
Mearim	370	1,095
Affluentes deste:		
Pindaré	270	515
Grajahú e o aff Sant' Anna com 48	400	574
Itapicurú (Maranhão)	750	1,650
Monim	120	...
Parnahyba	1,212+420	1.716
Affluentes:		
Urussuhy	400	...
Gurgueia	120	739
Canindé e seu affl. Piauhy	198	855
Rio Mundahú	33	198
Itapicurú (Bahia)	...	790
Paraguassú e seu affluente Jacuipe nav. até cidade de Nazareth	...	520
Pardo até a cidade do rio Prado	500	792
Jequitinhonha (o alto nav. entre Mendanha e as ilhas das Panellas, obaixo—78) até Arassuahy	500	1.082
Peruipe	39	132
Mucury	198	528
S. Matheus	100	500
Affl. deste Itaúna	120	...
Rio Doce nav. em grandes trechos	...	977
Affl. deste: Sussuchy Grande grandes trechos	...	330
Cuiété com trechos navegaveis	...	180
Manhuassú com trechos navegaveis	...	264
Itapemerim nav. até Cachoeira	...	...
Itabapuana	66	264
Parahyba do Sul	104	1,058
Ribeira de Iguape nav. até Xiririca	150	502
Seu affl. Juquiá nav. até Juquiamirim	30	172
Itajahy	120	240
Affl. deste Itajahy Mirim nav. até Taboleiro.		

O MEDITERRANEO SUL RIO GRANDENSE.

As lagôas dos Patos e Mirim ligadas pelo rio S. Gonçalo formam um mediterraneo de uns 600 Kil, de comprimento, cujo desaguadouro é o Rio Grande, canal de uns 15 Kilometros de extensão.

A lagôa dos Patos tem de comprimento 303 Kil, e na maior largura 120 Kil.

A Mirim tem de comprimento uns 200 Kil, e de largura de 12 a 60 Kil.

O rio S. Gonçalo, o canal que as une tem 77 Kil, de extensão.

Dos rios tributarios da lagôa dos Patos destacam-se dous:

1°—O Jacuhy, com uns 240 Kil, de navegação, nasce nos campos da Vaccaria e corre successivamente de E. a O., depois ao Sul e por fim a E.; lança-se no Guahyba defronte da cidade de Porto Alegre. Este tem 53 Kil, de curso e os dous juntos 616—São affluentes do Jacuhy: o Vaccacahy, pouco nav. e o Taquary nav. 80.

2°—O Camaquan com um curso de 200 Kil e navegavel até S. José do Patrocinio.

Os outros—o Cahy, o Sino (nav. até S. Leopoldo), O Gravatahy, que se lançam ao Norte, e o Araça, o Duro, o S. Lourenço a Oeste são secundarios pela exiguidade do curso ou por serem pouco navegaveis.

São tres os tributarios mais importantes da lagôa Mirim:

1°—O Jaguarão navegavel até Serrito=36 Kilometros.

2°—O Piratinim tem navegação mais facil e mais estensa=até a villa de Piratinim.

3°—O Pelotas tem 36 Kilometros de navegação.

Os rios Cebolhaty, S. Luiz, Taquary e outros são de menor importancia.

A BAIXADA FLUMINENSE.

Ha um grupo de pequenos rios, de curso pouco consideravel, dignos entretanto, de especial commentario por sua feliz situação e pela influencia benefica que poderão prestar á região por elles regada.

Não ligam Estados longinquos, servindo ao seu intercambio, nem representam geralmente de escoadouros á exportação.

Formam, porem, uma rêde fluvial de 300 Kilometros de estensão, propria á producção de generos de consumo.

Tudo isso se refere ás redondezas da cidade do Rio de Janeiro e de parte do Estado do mesmo nome, banhadas pela bahia de Guanabara.

Muito se havia escripto sobre a desobstrucção daquelles rios e a drainagem dos terrenos por elles alagados pois infelizmente tal era o seu estado, ha poucos annos.

Quem poz em pratica tão providencial idéa foi o actual Governador do Estado do Rio de Janeiro, o Dr. Nylo Peçanha, quando na presidencia da Republica. (1910).

A empresa, não se póde negar, exigirá avultado capital, mas a sua realisação recompensará duplamente todos os trabalhos dispensados nos melhoramentos, pois abastecerá, como outr'ora, de generos alimenticios a capital da Republica centro consumidor de um milhão de habitantes e a do Estado do Rio de Janeiro, Nictheroy, com uns 80,000 habitantes, e ao mesmo tempo saneará a região paludosa dos rios, assim punida por elles pelo passado abundono.

A zona saneada e provida de meios de transportes, graças a desobstrucção dos rios, verá os seus terrenos valorizados e offerecerá uma bôa occasião aos pequenos lavradores.

Era triste e desanimador o estado em que se achava a grande faixa de terra, que circunda a bahia do Rio de Janeiro, tambem denominada Guanabara.

Esses terrenos, injustamente condemnados, constituem uma vasta planicie de 3,763 Kilometros quadrados, abundantemente regada pelas correntes oriundas das encostas das montanhas que a limitam circumdando, e são as serras:—da Taquara, da Tocaia, de Petropolis, dos Orgãos e de parte da serra do Mar e de outros pequenos serrotes.

A planicie é conhecida entre nós pelo nome de Baixada Fluminense.

A pittoresca bahia do Rio de Janeiro onde vem esses rios desaguar mede na barra 1500 metros de extensão.

Logo em frente na entrada se encontra a ilhota da Lage, mais longe varias ilhas e a Serra dos Orgãos.

Passando-se a barra veem-se dentro na margem oriental a cidade de Nictheroy e na occidental a capital da Republica.

Encontram-se tambem nas margens da bahia outros centros de população mais ou menos importantes.

A bahia tem de cumprimento da ponta de S. João á foz do rio Magé 30 Kilometros; de largura, do rio Mirity a Macacú, 28 Kilometros; de circuito 143 Kilometros.

São numerosas as ilhas banhadas pelas aguas da Guanabara. Entre ellas se distinguem as do Governador, Paquetá e mais de 80 de differentes dimensões.

Desemboccam na bahia os rios: Merity, Sarapuhy, Ignassú, Estrella, Suruhy, Magé, Guapy, Guarahy, Macacú, Guaxindiba, e varios riachos de menor importancia.

Não tendo havido, durante um longo periodo, o menor cuidado na conservação dessas vias aquaticas, seus leitos gradualmente ficaram obstruidos pelas vasas, troncos de arvore e desmoronamento das barrancas. Foram geralmente attribuidos esses males á expulsão dos Jesuitas grandes proprietarios daquellas terras.

Em consequencia dessas circumstancias transbordavam os rios nas enchentes, cobrindo longos tratos de terra.

Não tardou a receber tal incuria o merecido castigo. As febres assolaram toda a Baixada, donde foi fugindo a população.

Deixaram de ser navegados aquellas vias aquaticas e desta forma ficaram abandonados aquelles terrenos bem aproveitaveis.

Corre-nos o dever de provar algumas dessas nossas asserções.

Fundada a cidade do Rio de Janeiro em 1565 por Estacio de Sá junto ao morro Cara de Cão, este governador concedeu grandes trechos de terreno aos seus companheiros de luctas e combates.

Pouco e pouco foram esses trechos occupados por agricultores, que levantaram engenhos para a fabricação de assucar.

Observa-se isto nos mappas antigos entre os quaes citaremos os do Jesuita Capassi e o levantado em 1763 por ordem do Vice-rei Conde da Cunha pelo capitão Manoel Vieira de Leão.

Em toda a orla da bahia diversas capellas assignalavam pequenos centros da vida agricola e industrial.

E tal era o desejo dos Portuguezes em estabelecer-se em taes localidades, que dous dos primeiros Governadores, Salvador Corrêa de Sá, o velho, e Christovam de Barros fundaram engenhos o primeiro na ilha do Governador e o 2° em Magé, no fundo de bahia.

Neste rio, então muito piscoso, havia grande quantidade de peixe, bom e saboroso.

As fataças davam logar a reunião do povo nesta localidade duas vezes por anno, convidados pelo proprio Conselho ou Camara Municipal.

A isso se chamava ir ao poraqué.

RELATORIO DO MARQUEZ DE LAVRADIO.

Para dar ligeira idéa da uberdade dos terrenos, que orlam o litoral da bahia do Rio de Janeiro e dos circumvisinhos, que se serviam dos rios para enviar ao mercado da cidade diversos generos, basta ler a segunda parte do relatorio apresentado pelo vice-rei, Marquez do Lavradio, em 1779, a seu successor Luiz de Vasconcellos e Souza.

Neste relatorio occorrem as relações parciaes enviadas áquelle Marquez pelos diversos mestres de campo, commandantes de tropas milicianas dos differentes districtos em que estava dividida a Capitania do Rio de Janeiro.

No districto de Itamby havia quatro freguesias, 913 fogos, 17 engenhos de assucar, 2 engenhosos.

Este districto exportava por anno—255 caixas de assucar, 197 pipas de aguardente, 28,500 alqueires de farinha, 2,900 de feijão, 2,480 alqueires de milho, 9,600 alqueires de arroz, 70 barcos de carvão, 400 barcos de lenha, 150 barcos de madeira de falquejo, 1,500 duzias de taboado.

A exportação fazia-se por 24 portos, onde chegavam saveiros, e em alguns podiam chegar barcos.

Existiam 53 carros de conduzir mantimentos, e 35 barcos para o mesmo fim.

Registravam-se neste districto as villas de St° Antonio de Sá e Villa Nova de S. José de el-rei.

No districto de S. Gonçalo, Itaypu e S. João de Icarahy notavam-se 3 engenhos de aguardente, 25 engenhos de assucar.

Exportava 623 caixas de assucar, 450 pipas de aguardente.

Colhiam-se 13,800 alqueires de farinhas, 2,800 de feijão, 2,061 de milho, e 1,150 de arroz.

Existiam 27 lanchas e 28 saveiros nos portos da Boa Viagem e S. Domingos de praia Grande.

Nos outros portos comprehendidos entre a praia Grande (Nictheroy) e o Districto de S. Gonçalo numerava-se ainda mais 44 saveiros.

No Districto de Inhomerim comprehendendo as freguezias de N. S. da Piedade de Inhomirim, N. S. da Guia de Pacobahiba, S. Nicoláo de Susahy, N. S. da Piedade de Magé, contava-se o seguinte:

Na primeira dessa freguezia existiam 3 engenhos, um fabricava 20 caixas de assucar e 10 pipas de aguardente; o segundo 18 pipas de, guardente.

Produziam as terras desta primeira freguezia 4,320 alqueires de farinha, 24,150 de milho, 800 de arroz, 1,900 de feijão.

Existia um porto chamado da Estrella com 17 barcos. No rio da Estrella podiam navegar barcos.

Na freguezia de Pacobahyba não havia engenho de assucar nem de aguardente.

Entretanto exportando 4,000 alqueires de farinha, 2,000 alqueires de arroz, e 3,000 cachos de banana.

Contavam-se 5 portos, por onde trafegavam 9 saveiros e 1 lancha.

Em S. Nicoláo de Suruhy achava-se creado um engenho de assucar que fabricava 5 caixas de assucar e 2 pipas de aguardente.

Exportava farinha: 3,600 alqueires, arroz, 2,390, feijão 60, milho, 200, cachos de banana, 17,000.

No porto principal da frequesia contavam-se 6 barcos.

Na freguezia de Magé havia 2 engenhos, um exportava 20 caixas de assucar e 12 pipas de aguardente; o segundo 10 caixas e 6 pipas.

Esta freguesia exportava 5200 alqueires de farinha, 570 de arroz, 250 de milho, e 120 de feijão.

Havia 4 portos de embarcações. O primeiro com 14 barcos, o segundo villa da Piedade com 5, o porto de Iriry com 21 e na Ilha de Paqueta 28 barcos.

Já nesse tempo no rio Iriry não podia entrar barcos.

No districto de Irajá comprehendendo as freguesias do Engenho Velho, Inhauma, Irajá, S. João de Murity, Pilar do Iguassú.

Nesse districto, comforme escreveu o Mestre de Campo Pernando Dias Paes Leme havia 1.009 fógos, 27 engenhos de assucar, 2 engenhocas.

Exportava 537 caixas de assucar e 329 pipas de aguardente.

Mantimentos: farinha 25,750 alqueire, feijão 2394; milho 2326; arroz 5470.

Contavam-se 33 portos servidos por 48 barcos e 42 canoas.

O districto de que era mestre de campo Andrade de Sotto Mayor Rondon comprehendia diversas freguesias fóro do litoral da bahia, a excepção de N. S. da Piedade de Iguassú.

Nesta produziam-se 10.000 de farinha, 400 de feijão, 400 de milho, 10.000 de arroz.

No rio Iguassu havia 5 portos e mais dous no litoral.

De um documento firmado em 1788 pelo Juiz de fóra Balthazar da Silva Lisbôa lê-se o seguinte com referencia a capitania do Rio de Janeiro:

Innumeraveis rios, portentosas cachoeiras, cujas deliciosas aguas regam os admiraveis terrenos por onde passam, ao mesmo passo que podem, a maior parte delles, servirem a navegação e ao commercio, contem multa riqueza sepultada no seu seio.

Descrevendo os rios que desembocam na bahia do Rio de Janeiro, ainda o mesmo Lisbôa, ao tratar dos rios diz: "O Irajá navega-se pouca distancia até o porto de seu nome.

O Merity não serve para a navegação devido ao seu pouco fundo. Só a permitte uma legua adiante da.

O Serapuhy dava navegação por 1 legua larga.

Iguassu admittia navegação em 4½ leguas. Nelle desaguava o rio Jacaré, navegavel ½ de legua.

O rio Morobay affluente do Iguassú navegavel por 4 leguas. Nelle desemboca o rio do Ramos, navegavel 2 leguas.

Do Iguassu é tambem affluente o rio Caricambuabo com meia legua de navegação.

O rio Inhomerim tem duas leguas de navegação.

Nelle desaguam o Jaguare-mirim com meia legua nav.

O rio Saracuruna—1 legua nav.

Neste desagua o Anhangá, pouco navegavel.

No Inhomirim tambem desagua o rio da Figueira, que nascendo na Serra do Frade, póde ser navegado por canôa até a mesma serra.

O Suruhy tem 2 leguas de navegação.

O Iriry tem 1 legua escassa nav.

O Magé Assu tem 2 leguas (nav).

O Guaxindiba tem 1 legua e meia.

O Macacú.

O Guapimirim.

Por ahi se vê:

Já nos fins do seculo 18 era pouco consideravel a navegabilidade desses rios, entretanto, serviam elles de vias de transportes de varios generos, como acima ficou dito.

Era de urgentissima necessidade sanear cerca de quatro mil Kilometros quadrados, tornando assumpto de valorisação terrenos inuteis e summamente nocivos á salubridade local.

Em 1910 como vimos o Governo Federal resolveu realisar tão grandioso emprehendimento.

A' testa dos trabalhos technicos foi nomeado o Engenheiro chefe, o Dr. Fabio Hostilio de Moraes Rego.

O movimento que já se tem feito consta de relatorios parciaes, apresentados annualmente ao Governo.

O ultimo relatorio tem a data de 15 de Abril de 1914.

Ao encerrar esse relatorio a commissão de profissionaes chefiada pelo Dr. Moraes Rego garantia que já se podia entregar á industria agricola 32.000 hectares de terrenos saneados, alem de cerca de 10,000 que já podem ser cultivados na bacia do rio Estrella.

Alem das vias de communicação maritimas, fluviaes e terrestres, já existentes, a commissão tem-se interessado junto ao Presidente do Estado do Rio de Janeiro pela restauração das antigas estradas em vias carroçaveis e abertura de novas, de modo que em qualquer parte, fiquem reduzidas, tanto quanto possivel, as distancias dos transportes para os rios e canaes e para as estações das estradas de ferro.

Reproduzindo tudo quanto escreveu em relatorios anteriores, o Dr. Moraes Rego no Jornal do Commercio de 26 de Março de 1915 offerece novos subsidios de tudo quanto occorreu desde Abril de 1914 até Março de 1915.

Até 30 de junho de 1915 tem se despendido com as obras de saneamento da Baixada Fluminense 11.132, 895,017 rs.

Entre esses trabalhos avultam o saneamento das bacias dos rios Merity, Sarapuhy, Suruy, Srury Mirim, Magé e Iriry, Sarensito e drenagem da bacia do Estrella, saneamento da bacia ao Sarapuhy.

Figuram como verbas no titulo dessas despezas-aterros, material fluctuante, dragas, dous rebocadores, tres grandes chatas para transporte de lama, tres chatas para transporte de material, fluctuantes, estaleiros.

O saneamento dos rios Merity, Soropuhy, Suruhy, Suradas-Mirim, Iriry e Magé deram uma area de 701 Kilometros quadrados, sendo abertos nestas bacias alem de vallas de dranagem em uma extensão superior a 500 Kilometros, os seguintes canaes, todos navegaveis em qualquer occasião por embarcação de 1.50^{m} de calado.

Na bacia do rio Suruhy, canal de Suruhy; na bacia do rio Magé, canal de Magé; na bacia do rio Sururuhy canal de Sururuhy.

O que dá um total de $25,788^{m}$ de canaes, alem de 23939 de canaes abertos nas bacias dos rios Merity Iguassú, Estrella, Suruhy, Guapy, Magé, Macacú e Guaxindiba, ou no total de 50 Kilometros approximadamente.

Alem do saneamento das bacias dos referidos rios estão sendo abertos actualmente mais 5 canaes.

Para justificar os resultados que se poderão obter de tão notavel commettimento, tomamos a liberdade de apresentar o ultimo relatorio do Dr. Moraes Rego, opusculo que serve de honra a engenharia nacional.

Assim beneficiada tão vasta area de terreno voltarão os dias felizes, em que a Baixada Fluminense foi séde de actividade commercial e industrial e pela navegabilidade dos rios desobstruidos tornar-se-hão faceis os transportes por via fluvial, de generos alimenticios para as duas cidades de Nictheroy e Rio de Janeiro e centros populosos da bahia.

Mr. SMITH. Mr. Chairman, I had many opportunities, as president of their National College, to study the navigable rivers of Brazil. There are two points that are important for an American to know. In the first place, since the water which falls on Brazil reaches the

ocean in a large part through the mouth of the Rio de la Plata, it is exceedingly fortunate that up the two branches of the Rio de la Plata—namely, the Parana and the Paraguay Rivers—we have navigation for something like 2,000 miles. The head of this navigation, in three branches of the Parana, is found at waterfalls. One of these is very large. If you can imagine Niagara Falls a mile and a half wide and not quite so deep, but, say, 5 or 6 feet at breaking point you will have a representation in your mind of the wonderful power of that great fall. The Ticte and the Tocantins are both navigable for a great distance, but in each case at the head of navigation there is a waterfall capable of developing a great many thousand horsepower. The navigation of those rivers, as I have seen them, laying aside, of course, the Amazon, which is a branch of the ocean, is made in fairly good boats of light draft, propelled by steam made from wood, because Brazil is unfortunate in not having a coal supply at all adequate for either navigation or construction purposes. And in Brazil they are putting in the railroads even parallel to the river—a fact which should be noted.

The Chairman. This question of inland transportation is most interesting to everybody, and I will just supplement one of the remarks of the speaker by saying that the Amazon, which flows from my own country (Peru), is navigable for ocean steamers drawing 26 feet of water, all the year around, for 2,600 miles up the river, right into the heart of Peru; and we have in Brazil the Parana, and the Paraguay, and with the Orinoco system of Venezuela, they make probably 40,000 or 50,000 miles of inland waters which are waiting for the hand of capital and the brain of the American to help in the development of the inland country of South America.

We will now ask Mr. R. C. Richards, general claim agent of the Chicago & North Western Railway, to read his paper on the very interesting subject of the "Safety-first movement on American railways."

THE SAFETY-FIRST MOVEMENT ON AMERICAN RAILWAYS.

By RALPH C. RICHARDS,
Chairman Central Safety Committee Chicago & North Western Railway.

One of the most important factors in the operation of railways is now and probably always will be the prevention of accidents, not alone because of the loss of life and limb and the suffering and sorrow caused thereby, but also because of the economic waste, the reduced efficiency of the organization, and the public and official criticism following in their wake.

For 10 or 15 years prior to the inauguration of the safety-first movement there had been much discussion in this country among the people, in the public press, in the legislatures, and in the Congress on the question of prevention of acci-

dents by law. In pursuance of the theory that fixing greater liability on employers to respond in damages would make them more careful and thereby reduce the number of accidents the employers' liability law and the workmen's compensation law—laws taking away the defense of the fellow servant, the assumption of risk, and contributory negligence—were enacted. As a result the employer was required to respond in damages for the benefit of the injured man or his dependents, but without reducing in any degree worth mentioning the number of accidents or decreasing the toll of death and injury.

Since no reduction in the number of accidents was accomplished by these laws, some other method had to be adopted, as neither the workingman, the employer, nor the public could longer stand such a drain on human life. In the United States, according to the Government reports, this amounted to 1 death every 16 minutes, or 98 deaths every one of the 365 days in the year, and 4 injuries every minute of every day, or 5,720 each day of the 365 days in the year. And, contrary to the general understanding, only one-tenth of the deaths and one-sixteenth of the injuries to the workmen occurred on the railroads. The others occurred in factories, shops, mines, stores, and on farms.

If I were a word painter, as a man should be who has a subject such as this to talk about, I could visualize to you and to every workingman and his family, to every employer, and to the public what these statistics mean of 35,000 workingmen killed and 2,000,000 injured every year. I could visualize the suffering, the privation, and often the destitution, as well as the loss of efficiency in carrying on our industries, and the loss to the community that follows in the wake of these 35,000 funerals and the vast army of the crippled and the injured, and I should then be assured of your active help in the greatest movement now in existence in this or any other country—the movement for the conservation of human life.

The management of the Chicago & North Western Railway, recognizing perhaps earlier than most of the other employers of labor the great suffering caused by avoidable accidents resulting in death or injury to its men, passengers, and others, determined about five years ago, both as a matter of humanity and for the purpose of increasing the efficiency of their organization, to inaugurate a movement to reduce accidents.

It was recognized that every time a capable, experienced employee was killed or injured it not only brought suffering and sorrow to the employee and his family, but it was necessary to employ a new and inexperienced man in his place, thereby increasing the risk to the other men in the service and at the same time decreasing the efficiency of the organization, often very seriously.

The work of organizing and directing this movement for the conservation of human life was assigned to me, and, as I believed that only through the active cooperation and assistance of the men who were being injured and killed could any plan for the prevention of accidents be made a success, and that if the men could be made to understand the matter right their cooperation and assistance could be secured, I undertook to organize the movement on the basis of making the men the controlling factor.

Practically the only accidents that could be materially reduced on the railways without the assistance of the public were those resulting in death and injury to employees, and therefore during the past five years great efforts have been made to reduce such accidents. I am glad to say that with the enthusiastic cooperation of the men and the management these efforts have been successful and have resulted in bringing about the movement now generally known as "safety first." It stands for—

1. The conservation of human life.
2. The making of safety men as well as safety things.

3. The elimination of the chance taker, who is the maker of cripples, widows, and orphans.

4. For greater safety and regularity.

The church tells us that the most important work in the world always has been and always will be the saving of souls, yet some people sell their souls for money, reputation, glory, or to satisfy ambition, love, or hate. But no one has ever been known to sell life or limb, our most precious possessions, and from which none of us will part. Thus it seems that the conservation of life and limb must be the second most important work in the world—a million times more important than the conservation of our water power, land, timber, minerals, or coal.

In the month of May, 1910, our work was begun by holding meetings on all the divisions of the system—first, of the division officers and foremen, and afterwards of the men. Details of the plan and the importance of such organization were carefully explained and the following facts pointed out:

1. That it was the men and not the stockholders, officers, or foremen who were killed and injured, who were paying the fearful toll in death and injury, and, consequently, it was the men and their families who would be most benefited by the success of this movement and the prevention of accidents.

2. That it was the little accidents that made up the larger part of the immense number of accidents that result in death and injury to workmen, and that if the little accidents could be stopped the big ones would take care of themselves, thus wiping out the whole accident business on the road.

The following shows the proportion of the little and big accidents on the North Western Railway for the four years ending June 30, 1915:

Killed: 220, being 92.5 per cent, or 12 out of 13, in little accidents that can be prevented in less time than it takes to make report; 18, being 7.5 per cent, or 1 in every 13, killed in collisions or derailments.

Injured: 22,497, being 97.9 per cent, or 46 out of every 47, in little accidents that can be prevented in less time than it takes to make report; 487, being 2.1 per cent, or 1 in every 47, injured in collisions and derailments.

3. That 12 out of every 13 employees killed are killed in little accidents and 1 in the big train accidents; 46 out of every 47 employees injured are injured in little accidents and 1 in the big or train accidents.

4. That the golden rule in railroading, "It is better to cause a delay than to cause an accident," should be observed.

5. That it actually took less time to prevent an accident than it did to report one.

6. That when we needed new men, if we had fewer accidents on our road than other lines had on theirs, we would have the pick of all the best railroad men in the country.

7. That we wanted to get rid of the careless habit and acquire the safety habit.

8. That we wanted to stop making cripples, widows, and orphans.

9. That the greatest risk a careful man runs is the risk of injury from some careless fellow worker, and that when the careless man will not change his ways and try to do better he should be put out of the service.[1]

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[1] In connection with the matter of accidents being brought about by carelessness or thoughtlessness, the Interstate Commerce Commission in their report for 1913 state: "The commission again is compelled to note the exceedingly large proportion of train accidents due to dereliction of duty on the part of employees. Fifty-six of the accidents investigated during the year, or nearly 74 per cent of the whole number, were directly caused by mistakes of employees. These mistakes were of the same nature as those

10. That every accident is a notice that something is wrong with the man, plant, or methods and should immediately be investigated by the person in charge of the work to ascertain the cause and apply the remedy.

11. That if the accidents should be reduced 50 per cent, the assessments for life and accident insurance which the men are paying ought to be reduced in the same proportion.

12. That the careless, thoughtless, reckless men and their bosses should be quarantined, the same as diphtheria, scarlet fever, and smallpox are quarantined. The former are by far the most dangerous.

Division safety committees were then organized on each division of the road. They were composed of the division engineer, superintendent, division master mechanic, and one or more representatives from each class of labor, such as engineers, firemen, conductors, brakemen, switchmen, signal men, trackmen, station men, bridgemen, carmen, telegraph operators, train dispatchers, and linemen.

Terminal safety committees were organized in the large terminal yards, the members being yardmasters, switchmen, engineers, firemen, trackmen, and carmen.

Shop safety committees were organized, composed of all classes of labor employed in the shops—always the men who were doing the work and getting hurt, not the bosses—making up the large majority of the memberships.

Local safety committees composed of a representative of each class of labor employed in that vicinity were also organized at outlying points, in order to stimulate the interest in the safety movement.

These committees were to meet once each month and a copy of their proceedings be sent to the central safety committee. The men to serve not less than 6 months nor more than 12 months, to be paid for their time and expenses while attending meetings and furnished with annual division transportation.

The central safety committee, composed of 11 general and division officers, representing all branches of the service, with me as chairman, was then organized. To this committee all division, shop, and terminal committees report, and all changes in standards, rules, and customs are submitted, and, if approved, are referred to the management for adoption. All matters pertaining to the divisions, shops, and terminals are disposed of by the local committees without referring them to the central safety committee. Each division, shop, local, and terminal committeeman is furnished with a copy of the proceedings of the central safety committee that he may know what is being done, not only with the recommendations of his committee, but with the recommendations made by all the other committees. A copy of the proceedings is also posted on all safety bulletin boards.

These various committees are furnished also monthly and annually detailed reports of accidents by divisions, statements of accidents by causes, and of avoidable accidents that happened the previous month. Copies of these reports of division, shop, terminal, and local safety committees are also posted on the safety bulletin boards.

Every member of the committees is furnished with a safety button as his badge of office, and at the meetings is made to feel that all are on a par, com-

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noted by the commission in its last annual report, namely, disregard of fixed signals; improper flagging; failure to obey train orders; improper checking of train register; misunderstanding of orders; occupying main track on time of superior train; block operator allowed train to enter occupied block; dispatcher gave lap order or used improper form of order; operator made mistake in copying order; switch left open in face of approaching train; excessive speed; failure to identify train that was met."

ing as committeemen, not as officers or employees, and that all are full partners and equally responsible for the success of the enterprise. The order of business prescribed each month for the different meetings, among other things, calls for a paper from some member of the committee on safety or efficiency.

Suggestions that might bring about greater safety and efficiency in operation are not only invited but solicited. Postal cards are furnished to all employees on which immediate notice can be given to the chairman of the division, terminal, shop, or local committee of dangerous conditions and practices, so that the same can be remedied immediately without waiting for a meeting of the committee.

Trips of inspection on special trains are made over the various divisions by members of the central safety committee and others for the purpose of demonstrating the desirability of finding defects and for the purpose of advertising the committee to all the employees, as well as for the purpose of getting in closer touch with the members of the local committees.

On a railroad 8,423 miles long, running through nine States, it necessarily took some time and considerable work to lay the foundation and to properly start such a movement, but on January 1, 1911, our organization was practically complete.

During 1911, the first year of the organization, 5,619 different matters were brought to the attention of these committees and acted upon.

During the years 1912, 1913, and 1914 there were 15,135 suggestions made by these committees, of which 14,536 were adopted.

In 1911, 1912, 1913, and 1914 there were 257 recommendations made by the various division, shop, terminal, and local safety committees, changing standards, rules, methods, or conditions were approved by the central safety committee and adopted and put into effect by the management of the company, 29 being rejected.

Meetings were held at various points on the system to which the general public were invited for the purpose of interesting them in the safety movement. At such meetings talks on the subject, illustrated by lantern slides, were given.

The management has also prepared and has sent to all school and municipal authorities along its lines what is known as a trespass circular, fully illustrated, calling attention to the great number of men, women, and children who are killed or injured when trespassing on the railroad tracks of the country, hoping that school authorities, after having their attention called to the matter, would instruct children to keep away from tracks and cars and thus prevent some of these unnecessary accidents.

We have given to the moving-picture shows at the various points along our line a set of slides showing the danger, especially to children, of trespassing on the track. These have been very generally shown.

Newspapers located at various points on the line have been supplied with plates calling attention to the number of trespassing accidents, giving recommendation made by the National Association of Railway Commissioners to the legislatures of various States for the passage of an antitrespass law, and statements showing the causes of accidents.

During the year ending June 30, 1914, the last year for which accident statistics have been furnished by the Interstate Commerce Commission, 5,471 persons were killed and 6,354 were injured while walking on railroad tracks or "flipping" on the cars. Fifteen times as many trespassers as passengers were killed and 28 times as many trespassers as passengers killed in train accidents. Thus 14 deaths occurred every day in the year because either we have no laws penalizing trespassing on tracks and cars, or, if we have, we neglect to enforce them.

I believe it is a conservative statement to say that it would cost the States, counties, and municipalities less to enact and enforce trespass laws than it does to pick up and bury the dead, hold inquests, and care for the crippled.

During the last 25 years there were 113,570 persons killed and 123,611 injured (total, 237,181) in the United States while walking on railroad tracks or "flipping" on cars; 156,540 (66 per cent) of these were citizens of the locality in which the accident occurred, mostly wage earners; 33,205 (14 per cent) were children under 18 years; and 47,436 (20 per cent) were tramps and hoboes.

If the worthy chairman of this meeting should ride from Chicago to Milwaukee on the North Western Railway, he would travel on the best track that can be made, equipped with automatic signals, in a steel vestibule train, steam heated, electric lighted, automatically coupled, hauled by the best known make of locomotive, with power brakes and electric headlight, and all manned by an experienced crew. If he should be killed in a train accident (which God forbid, though it is possible but not probable), great criticism would be made of the road and its management, and his death would not only be a great loss and affliction to his family and the community in which he lives but to the country. But let the same gentleman do as tens of thousands of men, women, and children do every day—walk the track—and meet with death or serious injury, somehow it would not be considered in the same light.

Perhaps there is some reason for this distinction in the value to the community of the life of a man when he rides on a railroad as a passenger and when he walks the track, but it is too deep for me. Every known appliance and equipment, every practicable protection the mind of experienced men have conceived, are used to protect the man in the car, but absolutely nothing is done by the State to protect a man from putting his life in danger by walking on the tracks.

Many of us remember the awful disaster in which the *Eastland* went down and carried with her nearly a thousand lives. For weeks the press was full of it. An investigation was made of the circumstances surrounding the disaster, the persons guilty of bringing it about indicted, and recommendations were made as to how such accidents could be avoided in the future. But in this country, where we claim to be as well educated and as far advanced as any other nation in the world, 5,558 lives went out last year; the same number, or more, will probably go out this year, and so on indefinitely until, as a Nation, we wake up and do something to stop trespassing. When an appeal is made to the Congress or to legislatures to enact a law to stop the slaughter, nothing is done about it. Nevertheless, laws imposing some new restriction or regulation on the railroads are passed, one may say, every day, until there are so many no one knows what they are, but there is no law to prevent trespassing.

After our work of organization of this movement was well underway, it was decided to award a banner to the division, shop, or terminal having the fewest accidents in proportion to the number of employees and its train mileage. The central safety committee awarded the banner to the Sioux City division in 1910, the Wisconsin division in 1911 and 1913, the East Iowa division in 1912, and the Peninsula division in 1914. I believe this is the first time that such an award has been made in the history of railroading in this or any other country.

In order to increase the interest in the safety movement and recognize in a substantial way the work done by the various safety committees, all the members of the committee of the division winning the safety banner are given a vacation of one week with full pay.

Safety rules for employees engaged in the shops and on the tracks were prepared and printed in the various languages by the central safety committee. These rules are given to every employee in those departments. The central com-

mittee also prepared what is known as a "card to new men." This card is furnished to all men when they enter the service of the company, calling their attention to the necessity of being careful.

Safety bulletins, properly illustrated, calling attention to avoidable accidents, are prepared by the central committee at frequent intervals and distributed to all employees and posted on the safety bulletin boards.

There are now more than 900 officers and men serving on the different committees. If Benjamin Franklin's saying is true that the eyes of the master can do more work than both his hands, surely 900 pairs of eyes, trained to look for defective conditions and dangerous practices, can do more than the eyes of 1 officer or 50 officers. From the results that have been attained during the five years that the safety organization has been in existence (in which time the earnings and mileage of the company have increased) a very gratifying improvement has been shown in the matters of—

1. Cleaning up obstructions in yards, station platforms, shops, and roundhouses.
2. Installing additional light and securing better working conditions.
3. Putting up railings at dangerous places.
4. Covering gearing, belts, and moving parts of machines.
5. Blocking frogs and guard rails.
6. Putting a stop to dangerous practices and customs.
7. Better inspection and repair of cars, engines, and machines.

These improvements have not only brought about greater safety, but also more efficient operation.

A reduction in our accident record, as compared with five years on the basis of the year ending June 30, 1910, that being the last year prior to the organization of the safety committees, is as follows:

	Per cent.
207 fewer employees killed—a decrease of	38.7
12,576 fewer employees injured—a decrease of	29.1
3 fewer passengers killed—a decrease of	5.4
1,091 fewer passengers injured—a decrease of	23.5
216 fewer outsiders killed—a decrease of	18.4
252 fewer outsiders injured—a decrease of	8.3
Total:	
426 fewer persons killed—a decrease of	24.1
13,919 fewer persons injured—a decrease of	27.4

In the above statement all the injuries to employees are counted where the employee loses more than one day's time.

For the year ending June 30, 1915, as compared with 1910, a reduction is shown of 66 per cent of fatalities and 40 per cent of injuries to employees. During 21 months of this period no trainman was killed, and during 2 months in 1915 no employee was killed.

No passengers have been killed in a train accident in the last two years, during which time 66,468,978 passengers were transported.

Mileage, June 30, 1910, 7,953; June 30, 1915, 8,423.

This means not only that in the last five years we have had 426 fewer reports of people killed and 13,919 fewer reports of people injured than we would have had during that period on the basis of the year ending June 30, 1910, but it means 426 fewer times has the priest and the undertaker been called, and that 426 fewer times have widows and orphans been made to sorrow, and destitution brought into families. It means that 13,919 fewer times has some one been injured, perhaps permanently, and that 13,919 fewer times has the doctor been

called. In our own railroad family we have avoided increasing the risk to other employees, our passengers, and patrons 12,783 times by not taking experienced men out of the service and putting green ones in their places, and just that many fewer times did we avoid decreasing the efficiency of our organization.

The gratifying results have been obtained in our work because of the earnest and enthusiastic cooperation of the men, and because we have learned that accidents are not inevitable, as we had begun to believe, but, on the contrary, that a large proportion of them could be avoided by the exercise of care. And because the North Western men have demonstrated that "safety first" stands for the conservation of human life, greater safety and regularity, safety men as well as safety things, increased efficiency, and greater harmony and cooperation, 90 other railroads in this country and in Canada, with a mileage of 205,059 miles, have also adopted the North Western safety-first organization or one practically similar to it.

We have been furnished with the accident statistics on 16 representative roads, covering a mileage of 60,431 miles, with safety organizations, for the years ending June 30, 1914, and June 30, 1915, which show a decrease of 34.2 per cent in fatalities to employees and 18.6 per cent in injuries to employees in 1915 as compared with 1914. This would indicate that the other roads interested in the safety-first movement are getting substantial results.

The National Safety Council, with headquarters at Chicago, was organized two years ago. There are approximately 1,500 members, representing corporations and individuals employing some 2,000,000 men in carrying on the various industries including transportation. This organization is probably doing more in a reasonable and practical way to foster and extend the safety-first movement than any other organization in this country.

About 1,500 North Western men serve on these safety committees every year, and they become more or less imbued with the idea that safety must be first. Eventually we hope to have every permanent employee of the Chicago & North Western Railway serve as a safety committeeman. We believe that this must certainly result in gradually bringing about a higher regard for life and for greater safety and regularity in operation.

Once or twice each year the chairman of the central safety committee and as many of the members of that committee as possible visit the division, shop, and terminal committees, spend a day or more with each, attend their meetings, take part in the transaction of the business of their committees, and do everything possible to keep up the interest and enthusiasm of the men.

In this connection we desire to call attention to what the Interstate Commerce Commission state in their 1912 report:

> Great possibilities in the direction of a solution of the problem of accident prevention lie in the so-called safety committees which have been organized on many roads. These committees are composed of officers and employees, who cooperate in striving to eliminate accidents due to failure of men properly to perform their duties. By making "safety first" the dominant idea in the minds of employees, and continually pointing out methods for its attainment, an important step in the right direction is taken.

Safety first is not a question of dollars and cents; it is a question of saving human life—the most valuable thing in the world and which, once gone, can never be brought back. Safety first is trying to save men from losing their legs and their arms, that never can be put back; it is trying to save the making of widows and orphans, of destitution and misery. Neither officers nor laws can do these things. Whether the men themselves can do it I believe is best indicated by the following statement showing what was accomplished by the safety-first committees during the year ending June 30, 1915, as compared with the

year ending June 30, 1910 (the last year before the safety organization was inaugurated), and 1911, 1912, 1913, and 1914:

	Killed.	Injured.	Earnings from operation.	Mileage.
1910 (before the safety-first committees were organized)	107	8,629	$74,175,684.69	7,942.82
1911	99	7,135	74,918,185.83	8,032.09
1912	70	5,907	73,698,591.58	8,172.24
1913	69	6,412	83,035,921.08	8,287.61
1914	63	5,912	83,677,050.79	8,383.98
1915	36	5,203	80,779,675.30	8,423.19

This is a reduction of 66.3 per cent in deaths in 1915 as compared with 1910; in injuries 39.7 per cent; and a reduction of 42.9 per cent in deaths and 11.9 per cent in injuries as compared with 1914.

In the middle west of the United States the average cost of railroad accidents, including the cost of caring for the injured, is about $114 per case, so that every time we prevent an accident we save $114. In the five years that the safety organization has been in existence on the Chicago & North Western Railway, with an increase in earnings and of nearly 450 additional miles of road, we have had 14,345 fewer accidents. Anyone can figure the saving in dollars and cents. About the time the movement started the accidents were increasing by leaps and bounds; now they are decreasing. Safety first was started to save lives and increase safety and regularity in operation, to improve working conditions, to create better feeling between the officers and men, and incidentally to save dollars. Just how much the movement has accomplished in this direction no one can tell, but everyone agrees that it has done very much.

Carlyle in his wonderful history of the French Revolution says, "Happy are the people whose annals are vacant." May not we railroad people, who have suffered from deaths and injuries caused by avoidable accidents, say, "Fortunate are the men and their families who work on a railroad whose accident record is vacant." This is what we are striving to bring about. And when we exercise the same care in selecting, educating, and supervising new men that we do in designing and selecting new engines, cars, machines, bridges, and structures, we will have taken what I believe to be the most important step to bring about the condition so much desired.

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EXHIBIT A.

R. R. B.

Chairman Safety Committee

CHICAGO FREIGHT TERMINALS

NORTH CRAWFORD AVENUE,

CHICAGO

[Face.]

Station ____________ *Location* ____________ *Date* ____________

Your attention is called to following practice or condition ______

____

____

Action taken or Recommendation } ______________________________

____

Signed ______________________________

If car or engine reported, always give number and initial.

[Back.]

EXHIBIT B.

CHICAGO & NORTH WESTERN RAILWAY CO.,
Chicago, April 29, 1913.

TRESPASSING ON RAILROADS.

To State, County, City, and Village School Authorities:

GENTLEMEN: Your attention is called to the following statistics showing the number of trespassers killed and injured on the railroads of this country during the last 20 years, which are taken from a paper read by Interstate Commerce Commissioner McChord at the First Cooperative Safety Congress held at Milwaukee in October, 1912:

Trespassers killed	86,733
Trespassers injured	94,646
Total trespassers killed and injured on the railroads of this country	181,379

According to the reports made of such cases to this company and the New York Central Lines, these cases should be divided as follows:

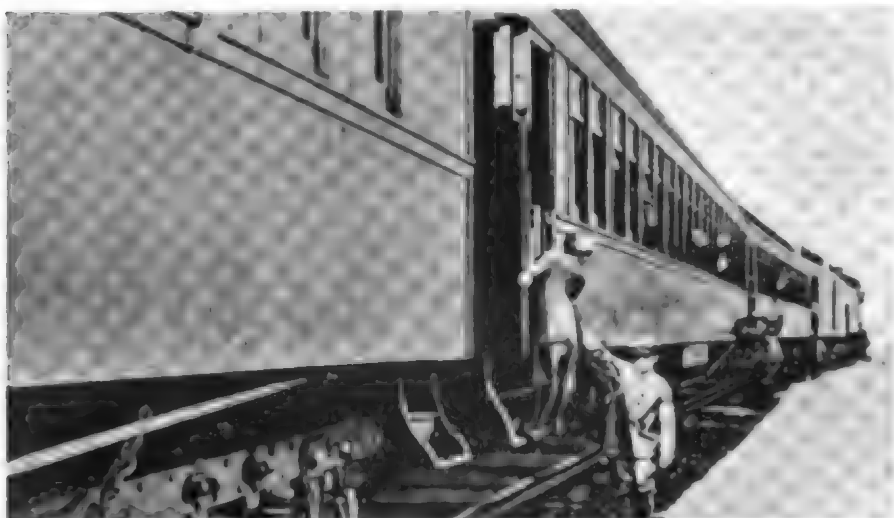
Young people under 18 years of age, residing in the vicinity of accident, many of them under 10 years of age	25,000
Tramps and hoboes	36,276
Citizens of the locality in which the accident occurred, mostly wage earners	120,103

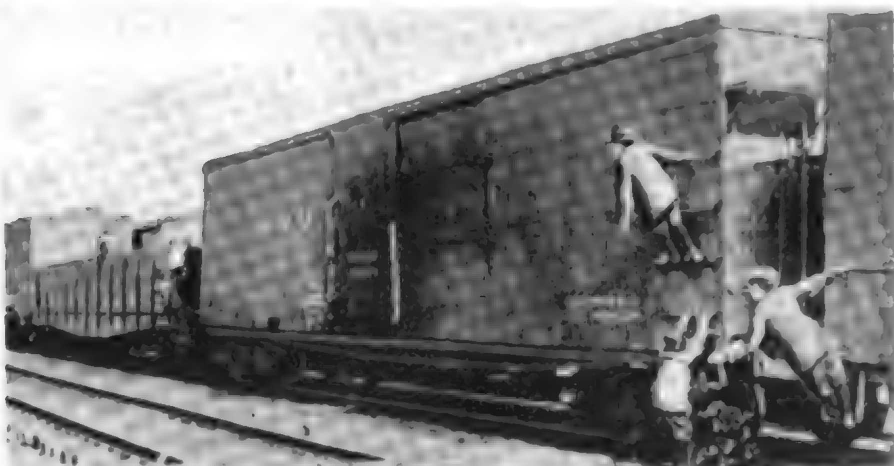
When you stop to think that in 20 years there were 25,000 young people killed and injured on our railroads—enough to make a mile post for every mile of travel in a trip around the world—and that in nearly every city, town, and village there is some child without an arm or a leg lost trespassing on the railroad, or a little grave in the cemetery of some child (perhaps an only child) killed flipping on the cars; and that during the last few years of the 20-year period referred to 14 trespassers were killed and 14 injured each day of the 365 days in the year; and that four-fifths of the killed and injured, or 145,103, were not tramps, but young people and children and respectable citizens—mostly wage earners of the vicinity in which the accident occurred, fourteen times as many trespassers killed every day and every year as there are passengers killed, because we are the only civilized country in the world that either has no laws penalizing trespassing on railroad tracks, or, where we have such laws, neglect to enforce them; and, while all kinds of laws have been enacted and enforced to secure the safety and protection of passengers, none have been enacted and enforced to prevent trespassing, although the lives and limbs of the 145,103 trespassers (which number is exclusive of the tramps) are just as valuable to their families and to the State as are the lives and the limbs of the passengers—you will, I think, agree with me that something should be done immediately to stop this unnecessary waste of life and limb.

It would actually cost the State and municipalities less to enforce a trespass law than it does to pick up and bury the dead and care for the cripples, to say nothing of the saving of human lives and limbs, the most valuable possession we have in the world, and at the same time protect the children—perhaps our own children—who may be among the number of those killed and injured if nothing is done to stop the trespassing.

Believing the school, public and private, is the place to commence to teach that trespassing must be stopped, your attention is called to the matter in

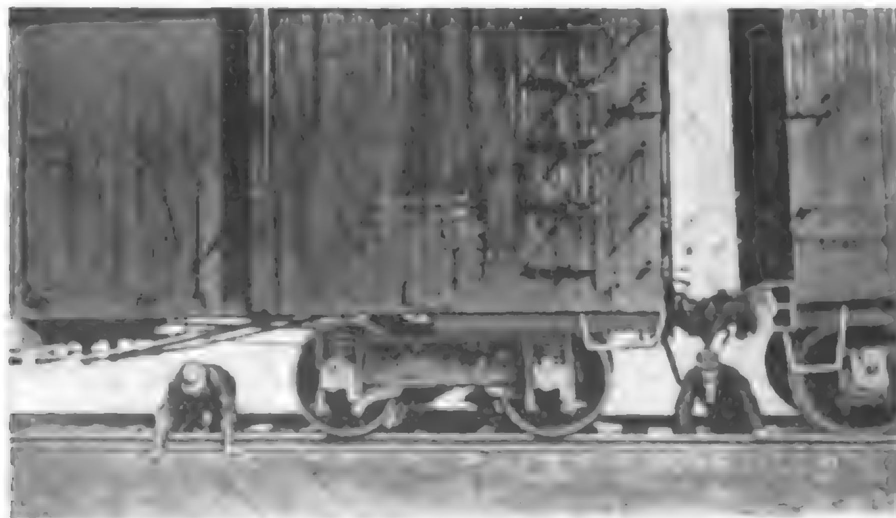










hopes that if you agree with me, the proper instruction will be given to the pupils in your school, and that they be especially warned of the danger of—

Walking on railroad tracks or bridges;
Loitering about railroad stations or cars;
Flipping on and off trains, cars, or engines;
Crawling under, between, or over cars;
Crossing tracks without looking and listening to see whether a train is coming;
Crawling under gates when they are down.

The cases reported and views shown in the appendix are actual cases taken from the records of this and other companies.

Yours truly,

RALPH C. RICHARDS,
Chairman Central Safety Committee.

APPENDIX.[1]

The following are a few illustrations of the appalling casualties that are happening to trespassers on railroads twenty-eight times every day in the year:

William C. Golden and Walter L. Golden, 12 and 10 years old, respectively, struck and killed while walking on the tracks 2 miles south of Crescent, Iowa, August 19, 1910. These two boys had run away from their home in South Omaha, Nebr., and were walking on the tracks in the nighttime, when they were struck and killed.

Walter Stilson, 3 years old, injured at Redfield, S. Dak., October 17, 1911, about 11 a. m. This child wandered onto the tracks, and his foot became caught in a cattle guard, and although fireman on approaching train climbed out on pilot and attempted to lift the child from the track he was unable to do so, and the boy was run over and his left arm crushed and amputated.

James Wherry, 9 years old, was playing on the elevated tracks near Irving Park Station, Chicago, November 19, 1910, about 9.15 a. m., and ran alongside of a freight train, attempting to jump on the cars to ride, and while doing so was struck by the girder of the viaduct over Fortieth Avenue, knocked under the wheels, and killed.

Joe Zencula, 8 years old, struck and injured at 6.45 p. m., May 10, 1912, while playing on the elevated tracks in Chicago. He was struck by an engine.

Melvin Martha, 3 years old, struck and killed by train No. 2, east bound, at Ashton, Ill., March 1, 1911, 10.30 a. m. This child, who was the grandson of the section foreman, was walking on the track, evidently going from his home to his grandfather's house, when he was struck by a train. The fireman first saw this child when the engine was about 500 feet from him, but was unable at that time to tell that it was a child on account of its clothing being almost the color of the tracks, and when the enginemen discovered what the object was they were unable to stop in time to prevent the accident.

Peter Miller, 4 years old, while playing on the elevated tracks near Rogers Park Station, Chicago, had placed a stone on the rail in front of approaching train, and when the wheels struck the stone it flew and struck this little boy in the head, injuring him.

George W. Young, jr., 8 years old, in company with three other 10-year-old boys, while playing on the depressed tracks on their way from the park playground, was struck and killed by passenger train No. 106, about 10.45 a. m.,

[1] See illustration, opposite page —.

August 23, 1911. There is a viaduct over the tracks at La Fayette Place, Milwaukee, where this accident occurred, and these boys had climbed through the fence and down the embankment to the tracks to watch a freight train go by, and while standing on the track this boy was struck by a south-bound train.

Fred Bebensee, trespasser, killed at Luzerne, Iowa, March 8, 1913, at 7.30 p. m. With two other boys he attempted to jump on train first No. 123 while train was passing Luzerne running about 13 miles per hour. He fell under the train and was run over and killed.

Edmund Provosta, 10 years old, injured at Curry, Mich., October 4, 1911, 6.30 p. m. While picking up coal in the yard, he crawled under a car, when same was moved and the wheels ran over his right leg, necessitating amputation above the knee.

Edward Carroll, 13 years old, injured at Indiantown, Mich., June 18, 1912, at 2 p. m. He had been stealing a ride on the side of a train, and in jumping off same he fell and rolled down an embankment, breaking his collar bone and otherwise injuring himself.

Harold Johnson, 5-year-old boy, injured at Central City, S. Dak., June 10, 1911. About 6.15 in the evening this boy, together with several others, was playing on some ore cars standing on a side track, when the brakes were released on these cars by the larger boys, and the car started to run down grade, and in jumping off this boy fell between the cars and was run over and so badly injured that it was necessary to amputate his left arm near the shoulder.

Guy Harlin, 6-year-old boy, injured at Lake City, Iowa, October 7, 1911, about 4.30 p. m., caused by his foot being caught in the turntable while playing around same, after having been warned to keep away.

Z. Zdrodiwski, 13 years old, injured at Layton Park, Wis., March 5, 1912, at 4.25 p. m., while attempting to "flip" on the side of a moving train. He fell and was run over, and his arm and leg crushed, resulting in his death.

Eugene Pierce, 10 years old, injured at Wessington, S. Dak., 1.30 p. m., August 5, 1911. This boy, in company with two others, aged 8 and 11 years, had been at the stockyards, where the father had been loading stock, and in getting away from the yards they passed a well at the water tank and opened the trap door, and, while climbing down the ladder into the well, he slipped and fell to another platform below, injuring himself.

Lennie Kilbridge, 8-year-old boy, on the way home from school stopped to play on the turntable at Canby, Minn., October 17, 1908, fell, and was caught between the table and the wall of the pit, lost one leg at the hip and other leg broken in three places; the mother was killed by the shock; the child is a permanent cripple.

Think how you would feel if your child or grandchild was injured in that way, and just think how much less time it would take to teach your child the danger of playing on turntables, cars, and tracks than it did to make a report of this accident.

Earl Johnson, 7 years old, injured at Long Lake, Wis., September 2, 1911, about 5 p. m. While playing on the tracks this boy found a torpedo, and, although cautioned by his companions not to do so, he struck it with a stone, and it exploded and a piece flew into his right eye, destroying the sight of same.

A farmer boy about 14 years of age riding freight train from one station to another for the fun of riding, fell and lost both legs and both hands.

A street circus was showing in a small country Missouri town; all the children and nearly all the grown-ups were watching the circus; grown men and women got on flat cars located on railroad tracks near the circus and the children flocked there also. An engine working some 600 feet away started to switch

cars. Three children between the ages of 10 and 12 were knocked off the cars and their legs cut off.

A laborer looking for work in Kansas City crawled under freight house platforms in the yards to sleep at night, legs extended over track. A switch engine during the night came in on the track to get cars and cut both legs off.

Five laborers, not employees of the railroad, riding in car to get to Chicago, which car was loaded with lumber, which shifted, and each of them was permanently and hopelessly crippled.

Boys of 15 and 16 years of age playing around empty oil tank cars in yards; one of the boys got inside tank and another boy with a lighted cigarette in his mouth crawled inside, tank exploded, and all the boys killed.

In a small Illinois town a boy of 10 years played around a train that was switching in the yards; in sight of dozens of citizens he fell under the train and both legs cut off.

Two young men, aged 16, farmer boys, while riding between vestibule of passenger cars had heads mashed to a jelly as train went around curve.

A blacksmith—father of 10 children—was in the habit of using the tracks as a pathway in going to and from his work, although there was a convenient public highway. In using this route he had to climb through a wire fence and walk over cattle guards. While so walking on the track one night he was killed. The public had to assist the widow and children.

A young man about 22 years of age, beating his way, went to sleep in the ice bunker of a refrigerator car. In due time the car was placed at the chutes to be iced and the trespasser had several 100-pound cakes of ice thrown on him. He was very badly injured and became a charity patient at a hospital.

Skeleton of Charles Brauer found in blow-off box in yard at Huron, S. Dak., June 29, 1912. This man had been missing from his home for several months. Evidently, while intoxicated, during the winter previous, he had crawled into this blow-off box to get out of the cold and was killed by engines blowing off steam into the box.

In the capital city of Illinois, little girls from 6 to 10 years of age, were playing upon private property of railroads in the sight of several women. Some were striking at cars in a freight train that was passing; one of them, 6 years of age, attempted to catch hold of stirrup of car, was jerked under car; legs cut off.

EXHIBIT C.

Rules for the Government of Employees Working in Shops, Roundhouses, and Repair Yards.[1]

(Effective Nov. 1, 1912.)

GENERAL RULES FOR SHOPMEN.

1. A person entering and remaining in the service of the company will be considered as an assurance of his willingness to obey its rules and familiarize himself with the dangers surrounding his work and position and avoid them as far as possible.

2. No person who is careless of others or of himself, if it is known, will be continued in the service of this company.

[1] These rules are printed in 11 different languages, as follows: English, German, Danish, Swedish, French, Italian, Greek, Hungarian, Polish, Bulgarian, and Croatian.

3. The violation of any of these rules by any employee of this company shall not be considered as an abandonment of such rule.

4. Each employee must see that these rules are not violated by others and should report any violations he may see.

5. Vigilance and watchfulness insure safety. To avoid danger adopt the safe course. Employees must not trust to the care exercised by others when their own safety is involved.

6. Remember that while every man is hired to do some particular work the safety of himself and his fellow men is more important than that work.

7. Employees of every class should familiarize themselves with the tools with which they have to work and should see for themselves that the conditions, tools, and machinery are safe before starting to work. Sufficient time will be given employees to see that the conditions under which they work are safe.

8. Keep off all railway or car tracks except in the discharge of your duties. Use great care. Before crossing any track stop, look, and listen.

9. Do not turn on any electricity, gas, steam, or water, or set in motion any machinery without first knowing that no one is in a position to be injured.

10. When any overhead work is to be done near electric wires the electrical department should be notified before beginning to do the work.

11. All persons not authorized by the chief electrician are forbidden to work upon any electrical apparatus.

12. Do not ride on engines, cars, or other moving bodies except when your duties require.

13. Foremen must not permit disregard of any rules.

14. Every employee should report promptly to his foreman any defect affecting the safety of any employee.

15. Employees are forbidden to leave their places of work to go to other parts of the plant except on business of the company.

16. Employees are forbidden to take short cuts over dangerous places where any other way is available which is known to be safe or less dangerous, even though such other way is less direct.

17. Wrestling, throwing of material, or "fooling" of any kind is positively prohibited.

18. Great care should be taken by men working above not to drop any material unless it is necessary, and then not without first giving due warning to those below.

19. When it is necessary for men to work beneath other men, those working overhead must be notified.

20. If you find anyone sick or injured on the property of the company, whether employee or not, take him or send him to the nearest company surgeon.

21. It is important not to neglect the slight injuries, as such injuries may result seriously.

22. Employees are warned to be careful of loads being carried by cranes or suspended in the air and must keep out from under them to avoid being injured.

23. When it is necessary to use runways and horses, ladders and scaffolds, employees should see that they are made of sound lumber and are properly placed.

24. When jacks are used they should first be examined to see that they are in order and properly adjusted. They should be set carefully to avoid tipping or slipping out from under the load.

25. No intoxicating liquors of any kind will be allowed on the premises, and no one will be allowed to work while under its influence. A violation of this rule is sufficient cause for dismissal.

26. Care should be taken in loading all material on cars or trucks to insure that no portion will fall off in transit.

27. It is dangerous to wear ragged or greasy overalls or jumpers, as same may be caught in moving machinery or catch fire.

28. All men should be conversant with the rules applying to the departments in which they have to work.

29. When repairing a crane or other machinery be sure to first notify the operator before starting to work on it.

30. After repairing machinery always replace safeguards before leaving the job.

31. It is the duty of all oilers to know that platforms and railings are in a safe condition, and if they are not they should be reported at once.

32. Do not pile material so high that it is liable to fall.

33. Do not ride on any burden being carried by a crane.

34. Cranemen are forbidden to move a load without a signal from the proper man.

35. Never work a crane, table, or other machinery until you have notified the operator at the point where the power is turned on.

36. When you complete a job never leave tools or material overhead. Tear down all temporary scaffolds as soon as you are through with them.

37. Do not allow boards with nails in to lie around anywhere.

38. Remember to be careful under all circumstances. Keep in mind at all times the necessity for care. It is by so doing one disciplines himself. When caution becomes a habit there will be few accidents.

39. The prevention of accidents is one of your most important duties.

40. Remember that at all times some of the men in the plant are inexperienced and may not know where danger exists. Warn any man when danger is near. He may know all about it. If so, no harm is done. If not, you may save his life.

41. Gasoline is a dangerous liquid. Should be handled carefully and only in daylight hours when no lights are necessary.

Live up to the "safety rules" of the company.
It may prevent an accident to yourself or others.

EXHIBIT D.

Rules for the Government of Employees Working on or About the Tracks.[1]

(Effective Dec. 1, 1911.)

1. Be careful to avoid injury to yourself and others.

2. Know that tools, material, etc., which you use in your work are in proper condition; if not, repair them or report to the proper person and have them repaired before using.

3. Look out for trains. Do not walk or stand on tracks except where necessary in performing your work.

4. Where there are two or more tracks, always travel when possible in the direction opposite to which the trains are moving, and keep a sharp lookout at all times in both directions.

5. Be alert, watchful, and keep out of danger. When the view is not clear, extra precautions must be taken to warn men of approaching trains. Foremen

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[1] These rules are printed in 9 different languages, as follows: English, German, Danish, Swedish, French, Italian, Greek, Hungarian, and Polish.

will provide themselves with whistles, or other suitable alarm, and see that the men understand what the signal means.

6. When necessary to use hand, dump, velocipede, or motor cars at night, a red lantern must be displayed at each end of the car in such a way as to be visible to trains in either direction, and extra precautions in the way of flagging taken at obscure places and on curves.

7. When running hand cars, torpedoes placed by other employees are exploded, they must be replaced by the crew of the hand car that explodes them.

8. Hand cars must not be attached to moving trains.

9. Hand cars must not be set off at public highway or at private farm crossings, except in emergencies.

10. When two or more hand cars are run in same direction, the speed of following cars must be adjusted so as to insure a distance of not less than 200 feet between preceding and following cars.

11. Trains will be run in either direction, on any track, when necessary or expedient, without special notice, and workmen will be governed accordingly.

12. Any employee who while on duty is careless about the safety of himself or others, or who disregards warnings, will be subject to dismissal.

13. In using track jacks always set them outside of rails. Never place them inside, as failure to remove them in time may result in a derailment.

14. When required to act as flagman in protection of work being done that affects safety of track and train movements, a flagman must be sent in both directions and each must be furnished with a red flag and torpedoes by day and with red and white lanterns and at least three red fusees additional by night.

Flagmen must go to a point not less than one-half mile (88 rail lengths) from the point to be protected and in the direction of expected train, and when weather is obscure, due to fog, rain, snow, or otherwise, a sufficiently greater distance to insure that any approaching train may be stopped. On reaching the required distance, flagman will, in addition to displaying the red flag by day and the red light by night, place one torpedo on the right-hand rail as viewed by an approaching train, and in addition to this will, at night, or when view is obscure, due to weather conditions, place a lighted fusee between rails of track upon which expected train may approach immediately upon seeing or hearing such train approaching. As soon as train has been stopped in this manner, flagman should inform engineer as to the obstruction or work for which the protection is provided.

Enginemen are required in all such occasions to stop and ascertain from flagmen what they are stopped for before proceeding.

Flagmen should report to foreman all violations of this rule by enginemen or trainmen.

15. Whenever employees see a nail pointing upward, they should either turn the board or timber over, or bend the nail down to avoid injury by stepping upon the same.

16. Do not pile material closer to rail than 6 feet.

17. Do not leave track tools between or near rails when trains are passing.

18. Extinguish all fires discovered, drive off all live stock found on right of way, and close all farm gates found open.

19. Take no chances. It is easier to do a thing right than to explain why you did it wrong, and by doing things right accidents and injuries are avoided.

20. Employees whose duties require them to work on or about the tracks must supply themselves with a copy of these rules.

21. Do not get on or get off trains or cars while moving, or go between cars in trains. It is dangerous to do those things.

EXHIBIT E.

To the New Man.

[By Chicago & North Western Railway Co.]

FOREWORD.

To the New Man:

You are about to enter upon a most important service. If you are the right kind of a man, you look forward to advancement in the service. Your success depends upon you. Don't forget that. Especially do we hope you may be able to say at the end of many years' service, "I was never injured, and no one was ever injured through my fault."

Don't you think you would be proud of such a record? To help you make it, we call your attention to some important safety precautions on the opposite page of this folder.[1] Read them over carefully. Then read them again and again until you get them fixed in your mind, which experience has taught is necessary.

We hope you will comply with them.

Central Safety Committee.

BE CAREFUL.

The safe course is the best. Better cause a delay than cause an accident.

Don't take chances. When you do, the lives and limbs of yourself, your fellow employees, and passengers are the stakes. Every man who gambles loses. You can't afford to lose.

Exercise of care to prevent accidents is a duty which you owe to yourself and your fellow employees. Don't feel that you are doing something improper in calling attention to defects in the property or to carelessness of fellow employees.

When necessary to go back flagging, remember that the lives of many persons are dependent upon you. You are paid "to go back," and there is no excuse for not going. Be sure you go back far enough, and take with you plenty of torpedoes, fusees, a flag, and a red and white lantern. Rule 99 is the most important rule in the Book of Rules.

Don't stand between engine cab and coal chute when taking coal. Keep your head inside cab of engine when engine is going in or out of roundhouse.

Never kick a drawbar to make a coupling. Better miss and try again.

Trainmen and switchmen should never go under train or engine without being sure that engineman knows where they are.

Other employees should never go under or between cars without being sure that engine is detached or cars are not to be moved. The surest way is to go around.

Never go between moving cars or engines for any purpose whatever. Stop them if necessary, and wait until they do stop.

Never stand between the rails and attempt to get upon the footboard of an engine as it comes toward you. Let engine pass and get upon footboard at the other end.

Never move cars at stations or sidings or other places where men are likely to be working in or about the cars without first ascertaining that no one is in a position to be injured by the movement and giving them proper warning.

Never get hands or feet in any part of apparatus or in the way of materials which may be moved automatically or by some one else. If necessary to do

[1] See below "Be careful."

this, block them so that you will be protected. Do not rely on some one else to protect you.

Never leave hand, velocipede, or motor cars on track while doing work. Always ride cars facing traffic.

Foremen should never forget that they are provided with whistles for warning fellow employees of danger and should be on the constant lookout for danger to themselves and others.

Remember that it takes more time to make a report of an accident than to prevent one.

Never handle tools, materials, or apparatus improperly, or allow them to get in such a condition as to give a false feeling of security to others. Remember, "safety first."

Remember that the rules of this company were made because experience has shown every one of them to be necessary, and they were made to be obeyed. You are paid to comply with all the rules, and not just those you think you ought to comply with. It is not for you to decide whether the rules are necessary. That question has already been determined by men of many years' experience in the service. Think of that when you think of promotion.

In case of doubt adopt the safe course.

EXHIBIT F.[1]

CHICAGO & NORTH WESTERN RAILWAY CO.,
Chicago, January 10, 1914.

SAFETY BULLETIN NO. 4.

The attention of all employees is called to the circumstances surrounding the following accidents in hopes that publicity of the facts will prevent similar accidents occurring in the future:

A flagman on Chicago pick-up, southbound, which had stopped to do switching, was killed. After engine had made several moves train was backed about two car lengths to clear switch, and shortly after the flagman was found under way car with both legs crushed. Instead of going back to flag it is supposed that he either leaned up against the caboose or else sat down at the rear of the caboose and went to sleep, and when train was backed up he was run over. (See fig. 1.)

Rule No. 99 says: "When a train stops or is delayed under circumstances in which it may be overtaken by another train the flagman must go back immediately with stop signals not less than one-half mile (88 rail lengths) or as much farther as is necessary to insure full protection, and where he can have an unobstructed view of an approaching train at least one-fourth of a mile farther * * *."

Every man who fails to observe this rule is a menace to every passenger and employee. We all know him and should teach him to flag right or get out of the service before he kills some one. It may be you.

A laborer was assisting in sawing logs and, while taking out a log from the machine, his hand was caught and crushed by the saw, which was not guarded. The attention of the foreman in charge of this machine had been called to the necessity of putting on a guard, but he neglected to do so. (See fig. 2.)

Every gearing, belt, or part of machine that men are likely to get caught in should, when practicable, be guarded; and when not so protected should be

[1] See illustrations, opposite page.



Fig. 1.

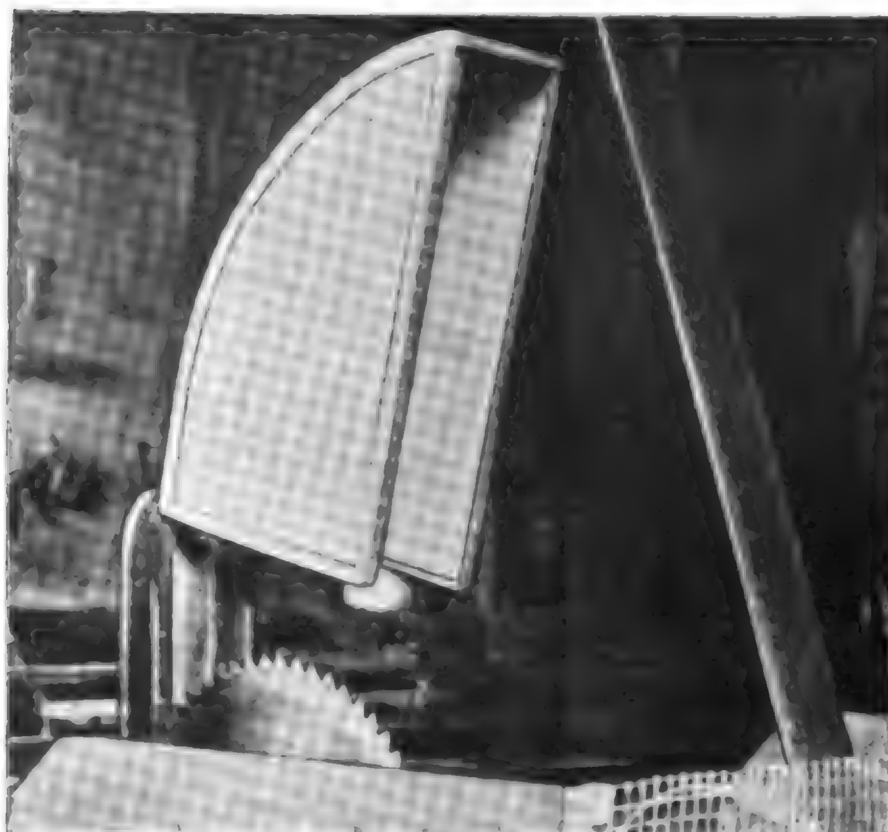


Fig. 2.



Fig. 3.

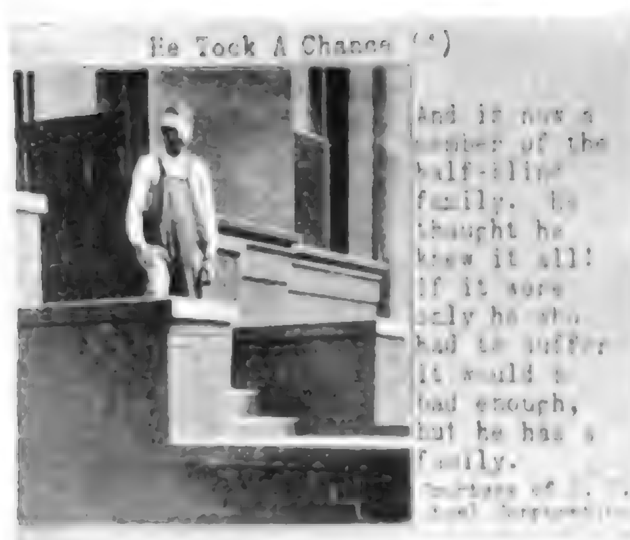


Fig. 4.



Fig. 5



Fig. 6.



Fig. 7.



Fig. 8.

reported, and every dangerous condition, defective car, engine, machine, careless practice or custom should be reported to some member of the safety committee or other proper officer in order that the same may be remedied before, and not after, some one is killed or injured. Safety postal cards are furnished for that purpose.

A switchman had kicked car in on track No. 10 and afterwards kicked some cars in on other tracks. Then he rode a car down on the track next to track No. 10. Another switchman, before he threw the switch for the last cut, noticed that the first car was close, measured the distance in the usual way, thought it would clear, but it was too close to clear a man, and the switchman, who was riding on the side of car, was knocked off and killed. (See fig. 3.)

Rule No. 963 requires that cars must be pushed in on siding far enough to clear. Why not do it? If it had been done, this man's life would not have been sacrificed and it would have taken less time to do it than it did to make a report of the accident. During the year 1913 we have had six other men injured from the same cause.

August 13, 1913, a machinist, while repairing an engine, struck the calking tool with a hammer, when a piece of steel flew and seriously injured his eye. (See fig. 4.)

The company had furnished goggles to prevent just such injuries, but this man failed to use them. Would it not be better to do so when doing work of this kind than to lose your vision?

A switch foreman working on track coupling up empty cars was killed; as he was attempting to go between moving cars or push over a drawbar, which was off center, other cars were backed up and he was caught and killed. (See fig. 5.)

Between September 1 and December 1, 1913, 5 other men have been killed and 35 other men injured in the same way. Why not stop going between moving cars and prevent accidents of this kind in the future? Rule 717 prohibits such practice, and the company pays us for our time to do the work safely.

A car repairer was pulling sheathing off a car when he stepped on a nail protruding from a piece of sheathing he had thrown on the ground. (See fig. 6.)

From January 1 to November 1, 1913, we have had 118 men injured in this way.

A passenger conductor injured; his train ran by station platform and was backing up. The conductor was standing on the steps of one of the coaches looking down to see if anything was wrong with the brakes, when a trunk projecting from a baggage truck standing on the platform struck him on the head and knocked him off the car. (See Fig. 7.)

Rule No. 861 says: "Freight, baggage, trucks, and other articles must not be allowed to stand on the depot platforms where they may cause accidents or inconvenience to passengers or employees * * *" Trucks loaded with baggage and freight should be kept far enough away from the edge of the platform so as to clear a man on the side of cars or on the steps of coaches, until the train has come to a stop, and should be moved away before the train starts.

A brakeman injured; was head brakeman on way freight No. 68. He borrowed a meal ticket from the fireman and started for the lunch room to get a package of tobacco. Another train was passing through the station, running, the injured man says, 10 or 15 miles an hour. He climbed between the cars and in jumping off fell, was run over, his right leg was amputated and a part of his left foot. (See Fig. 8.)

Better be careful than crippled.

Every accident is a notice that something may be wrong with the man, plant, or methods, and should be immediately investigated by person in charge of work to ascertain cause and apply remedy.

EXHIBIT G.

CHICAGO & NORTH WESTERN RAILWAY CO.,
January 20, 1915.

SAFETY BULLETIN NO. 13.

Safety first is not a question of dollars and cents; it is a question of saving human life, the most valuable thing in the world, which, when once gone, can never be brought back. It is trying to save men from losing their legs and their arms which never can be put back. It is trying to save the making of widows and orphans, destitution and misery. Neither the officers nor the laws can do it, but the workmen can do it if they try.

The following statement shows the reduction in number of accidents on the Chicago & North Western Railway for four and one-half years ending December 31, 1914, as compared with four and one-half years on same basis as year ending June 30, 1910, before the safety-first committees were organized:

	Per cent.
173 fewer employees killed, a decrease of	35.3
10,671 fewer employees injured, a decrease of	27.3
961 fewer passengers injured, a decrease of	22.8
210 fewer outsiders killed, a decrease of	19.4
228 fewer outsiders injured, a decrease of	8.2

Mileage June 30, 1910	7,953
Mileage Dec. 31, 1914	8,423

The North Western Railway operates in nine States, with a mileage of 8,423 miles; the safety-first work was commenced in May, 1910, and there are now over 900 men serving on the division, terminal, shop, local, and central safety committees. The best evidence of the effectiveness of the work done by the men serving on these safety committees is shown in the following statement of reduction in accidents for the six months ending December 31, 1914, as compared with the same six months in 1909, before the safety-first organization was put into operation.

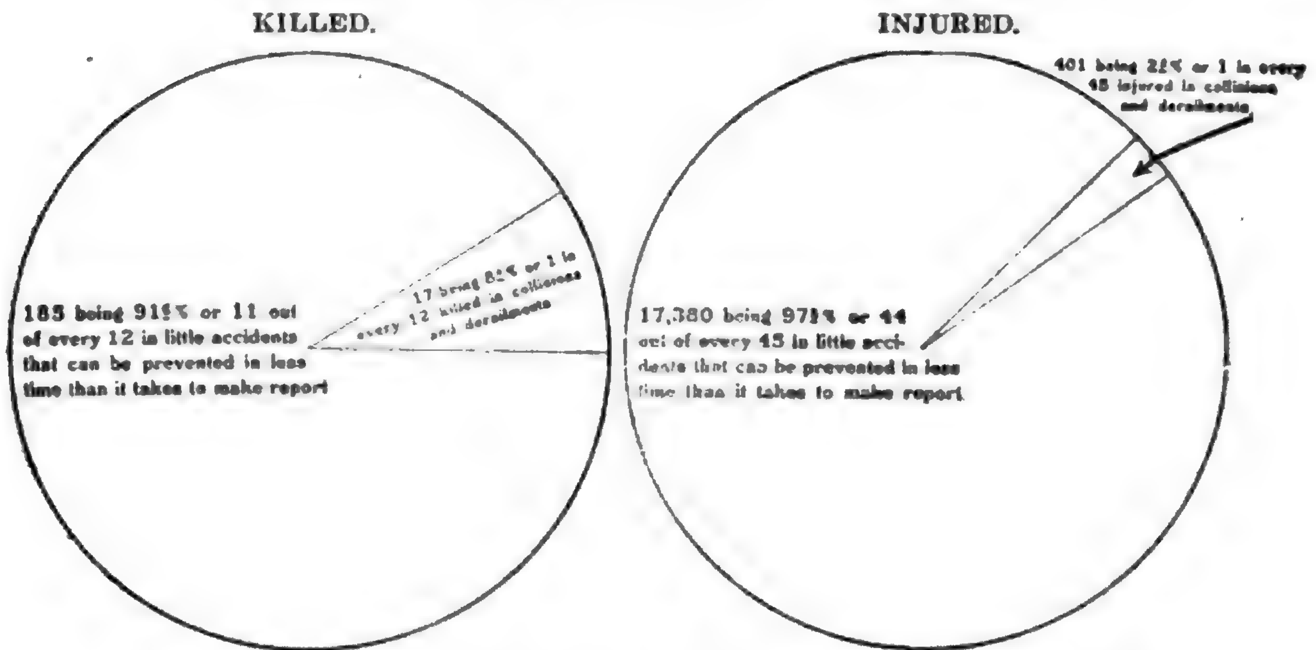
	1909	1914
Employees killed	61	24
Employees injured	4,546	3,025

In our statistics every case is counted where the injured person loses one day's time or more.

It has been the aim of the safety-first organization to impress upon the men that it was they and not the stockholders or officers of the road who were being killed and injured; that they are the controlling factor in the work; that every time an employee is killed or injured it not only brings suffering and sorrow to himself and family, but it necessitates the employment of an inexperienced man in his place, thereby increasing the risk of injury to all other employees and at the same time decreasing the efficiency of the organization.

The issuance of bulletins similar to the following was adopted for the purpose of calling to the attention of the men the importance of eliminating the little accidents which can be prevented in less time than it takes to report them.

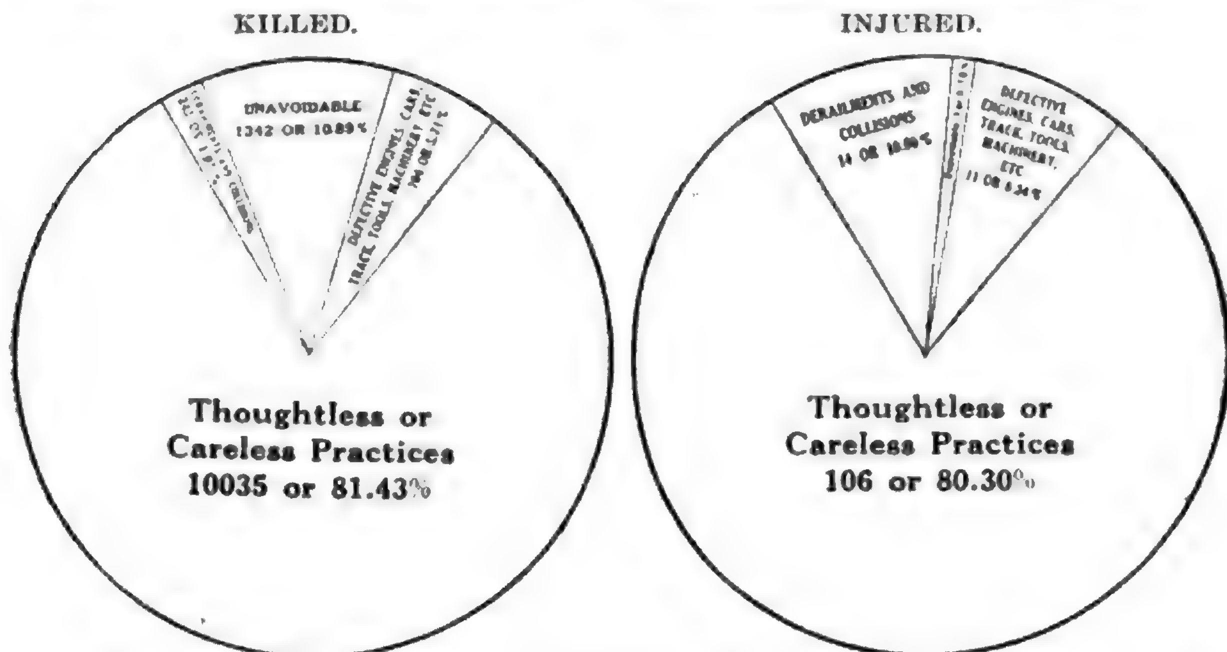
DIAGRAMS SHOWING EMPLOYEES KILLED AND INJURED ON THE CHICAGO AND NORTH WESTERN RAILWAY FOR YEARS ENDING JUNE 30, 1912, 1913, AND 1914.



Stop the little accidents and we will wipe out the accident business.

In order to show that a large majority of all accidents are preventable and a large part of them are due to careless or thoughtless practices and not to defective machines, structures, tracks, engines, or cars, the following diagrams were prepared and distributed to the men, posted on safety-bulletin boards (which have been placed at all points on the railroad where men congregate), and otherwise brought to their attention:

DIAGRAMS SHOWING CAUSES OF ACCIDENTS IN WHICH EMPLOYEES WERE KILLED AND INJURED WHILE ON DUTY DURING THE TWO YEARS ENDING JUNE 30, 1914.



Why not stop the thoughtless or careless practices and so reduce deaths and injuries to North Western men?

In the years 1912, 1913, and 1914 the following recommendations were made by the various safety first committees:

	Adopted.	Rejected.
Division committees	9,582	430
Shop committees	3,084	111
Terminal committees	1,456	32
Local committees	414	26
Central safety committee	257	29
Total	14,793	628

Because North Western men have become impressed with the importance of complying with the golden rule of railroading, "Better cause a delay than cause an accident"; that it is better to be careful than to be crippled; and that safety first stands for:

Conservation of human life;

Elimination of chance-takers, who are the makers of cripples, widows, and orphans;

For safety men as well as things;

For greater safety and regularity.

In four and one-half years they have accomplished this result—

381 fewer deaths, 11,860 fewer injuries.

Why not boost for safety first and help wipe out the accidents and make railroading the safest occupation in the world?

The following diagram will show how much legislation is needed to prevent people walking on railroad tracks and "flipping" on the cars:



Because the North Western men have demonstrated that safety first stands for—

The conservation of human life;

Greater safety and regularity;

Safety men as well as things;

Increased efficiency; and

Greater harmony and cooperation—

76 other railroads, with a mileage of 197,503 miles, have adopted the North Western safety first organization, or one practically similar to it.

This company will appreciate, carefully consider, and adopt, if practicable, any suggestion or recommendation from its employees, patrons, or neighbors which will make its operation safer, more regular, and more satisfactory to the public.

Remember that it takes less time to prevent an accident than it does to report one.

EXHIBIT H.

CHICAGO & NORTH WESTERN RAILWAY CO.,
July 12, 1915.

SAFETY BULLETIN NO. 16.

To all North Western men:

The safety-first movement is now 5 years old, and because through it North Western men have begun to realize that their lives and their limbs are their most priceless possession, as well as the greatest asset the company has, they have, by their enthusiastic cooperation with the officers of the corporation, brought about safer working conditions and have instilled in the minds of all employees the necessity of doing their work in a safe and careful way, so that the following reduction in deaths and injuries to the men who do the work has been brought about:

	Killed.	Injured.
July 1, 1909, to June 30, 1910 (before the safety-first committees were organized)	107	8,629
July 1, 1910, to June 30, 1911	90	7,136
July 1, 1911, to June 30, 1912	70	5,907
July 1, 1912, to June 30, 1913	69	6,412
July 1, 1913, to June 30, 1914	63	5,912
July 1, 1914, to June 30, 1915	36	5,203

Statement showing reduction in number of accidents for the five years ending June 30, 1915, as compared with five years on same basis as year ending June 30, 1910, before safety-first committees were organized.

	Per cent.
80 fewer trainmen killed, a decrease of	42.1
7,941 fewer trainmen injured, a decrease of	47.9
43 fewer switchmen killed, a decrease of	47.7
566 fewer switchmen injured, a decrease of	17.4
23 fewer station men killed, a decrease of	76.6
735 fewer station men injured, a decrease of	20.1
55 fewer trackmen killed, a decrease of	39.3
2,499 fewer trackmen injured, a decrease of	28.6
3 fewer bridgemen killed, a decrease of	20.0
562 fewer bridgemen injured, a decrease of	35.8
4 fewer shop and roundhouse men killed, a decrease of	20.0
1,048 fewer shop and roundhouse men injured, a decrease of	16.3
4 fewer unclassified employees killed, a decrease of	11.5
But an increase of—	
5 car repairers killed, 769 car repairers injured, 6 unclassified employees injured.	
Total reduction of—	
207 fewer employees killed, a decrease of	38.7
12,576 fewer employees injured, a decrease of	29.1
3 fewer passengers killed, a decrease of	5.4
1,091 fewer passengers injured, a decrease of	23.5
216 fewer outsiders killed, a decrease of	18.4
252 fewer outsiders injured, a decrease of	8.3

Total:	Per cent.
426 fewer persons killed, a decrease of	24.1
13,919 fewer persons injured, a decrease of	27.4

In this statement all injuries to employees are counted where injured person loses more than one day's time.

No passengers killed in a train accident during the last two years, in which time we transported approximately 66,000,000 passengers.

Mileage, June 30, 1910, 7,953; June 30, 1915, 8,423.

We have still much to do to make railroading the safest occupation men can engage in, but if we do as much in the next two years as we have done in the last two we will accomplish that result; and I am sure that if we will all work together to attain that end, and every man on the North Western report all dangerous conditions and practices before and not after some one is hurt, and prevent just one accident, we will make the fiscal year which commenced July 1 a memorable one not only in the safety-first movement and the annals of the corporation but in the history of railroading. And if we could operate the railroad for two months in the last fiscal year, as we did in April and June, without an employee being killed, why can not we do it for six months this fiscal year?

Yours truly,

R. C. Richards,
Chairman Central Safety Committee.

Remember that it takes less time to prevent an accident than it does to report one.

The Chairman. We will now call upon Prof. Jeremiah W. Jenks, who will read a paper on "The balance of trade in the commerce between South America and the United States." Prof. Jenks is well known in this country and I am sure needs no special introduction.

Mr. Jenks. Mr. Chairman, when the subject of this paper was agreed upon between the director of this division and myself we said to each other confidentially that neither of us knew anything about it particularly, so far as the facts were concerned, and we hoped as the study was made that some facts might be developed that would be of interest, not merely to the economists in throwing perhaps some light on certain economic theories, but also to the business men in bringing out some facts that were not very well known as regards the commerce between the United States and South America.

THE BALANCE OF TRADE IN THE COMMERCE BETWEEN SOUTH AMERICA AND THE UNITED STATES.

By JEREMIAH W. JENKS,

Professor of Government and Director Division of Public Affairs, School of Commerce, Accounts, and Finance, New York University.

The doctrine of the balance of trade has long been a fighting ground between the economists and business men, the former taking the position that, inasmuch as people would not sell goods unless they got their pay, nor could they buy

goods unless they made proper arrangements for payment, the balances (after the adjustment of the exchanges) would usually be arranged for normally in the course of business and therefore one need not worry. They have insisted that too much attention is given to the mere balance of merchandise exports and imports, and that there is no inducement either to export or to import unless a proper equivalent is given or received. They have maintained that the business man's fear of a so-called adverse balance of trade was not well founded since an adverse balance did not necessarily imply gold exports, nor a favorable balance gold imports. A favorable balance may draw no gold to the country, for the excess of merchandise exports may be needed for payments abroad other than for the purchase of goods, for tourist expenditures, for freights, for remittances of immigrants, and for payments on loans. They have, moreover, been disposed to minimize the importance of gold movements which, as they hold, respond to national necessities.

On the other hand, the business men, realizing to the full, probably more than do the economists, the very grave importance of confidence among business men and the need of a currency system of which the soundness must be beyond question, have always kept in the foreground the idea of a favorable balance of trade as important. They have held this view because a "favorable" balance ordinarily checks gold exports if it does not bring gold into the country. They have felt that a good stock of gold is significant, and they have generally been prepared to urge that the Government take some steps to secure business confidence through measures which, in their judgment, would protect the country's gold supplies.

It is not possible to say that either side is entirely right or entirely wrong. It is, however, always a matter of interest, and usually a valuable study, to follow somewhat carefully the course of trade between different countries and to see in what ways the balance of payments is adjusted. This generally throws a valuable light on economic conditions and business methods and even is suggestive of measures that might be taken to improve both methods and conditions.

The study of "The balance of trade in the commerce between South America and the United States" offers peculiar difficulties for a variety of reasons.

In the first place, any attempt to secure statistical data as regards the exports and imports of the various countries of South America is disappointing, since in any group of countries such as those of Europe or of South America divergent principles are found. Values of exports and imports are determined by different methods in different countries, divergent rules are followed in determining countries of origin and destination, and currencies are unfortunately not always stable in value. Data taken from South American sources are therefore not comparable and even lead to conclusions that seem absolutely conflicting. In consequence, in making this study, it has seemed to me best to use, not South American figures, but the figures of exports and imports collected by the Governments of the United States, of Great Britain and of Germany. These figures, with reference to each one of these countries, are comparable in their records of exports and imports from each of the separate South American countries, and are readily comparable also one with another. While not absolutely accurate throughout, they are sufficiently so to give us clear indication as to business methods, and from them we may reach fairly clear conclusions.

In speaking of South American trade we are apt to speak of South America as one market. As a matter of fact, it is not one but a number of different markets. In discussing the balance of trade of the United States with foreign countries, we may properly think of the United States as one whole—the

tariff laws are uniform, the methods of doing business are substantially uniform throughout the country, the great bulk of the trade is handled through New York and a few other ports where the conditions are not materially different—so that in its import and export business dealings we may consider it one market for purposes of discussion. Nothing of the kind can be done with South America. Although we may take the trade of the separate countries of South America and add them together to get totals, we must not—if we wish to be accurate—think of South America as a unit.

With these facts in mind let us consider somewhat carefully the trade with the different countries of South America; sometimes considering, for the sake of the totals, the trade as a whole; again analyzing this trade as the products of the leading countries show how this trade is carried on. The charts used and the data collected cover in the main the years 1904–1913; in one or two instances including 1914.

Taking South America as a whole, its trade with the United States, Great Britain, and Germany during this entire period has had ordinarily a so-called favorable balance, its exports exceeding its imports by $300,000,000 a year or more. (See Table 4.) This means, of course, considering that the country is relatively young in manufacturing industries, that it has been sending out in very large quantities the raw products of the farms, the forests, and the mines. As is the case with most new countries, it has been somewhat rapidly impoverishing the soil and shipping out its minerals, to receive in return manufactured goods; in part, those which its population needed for their own comforts of living, but likewise in part, machinery and the other means of developing more rapidly its natural resources, and supplying the means by which it might more easily still collect and export its own resources. The goods exported from South America to these countries serve to make various kinds of payments abroad—(1) for goods, (2) for such gold if any as may be imported, (3) for interest on debts previously contracted and other payments on the same, (4) for freights upon imports in foreign ships, (5) for expenses of tourists in Europe, and (6) for the remittances of immigrants. Should the goods exported not be sufficient for all these purposes the deficit must be supplied either with gold or with further evidences of indebtedness (securities).

The foreign national debts of the Governments of South America amount in round figures to $1,250,000,000.[1] It is impossible to tell how far these are in the form of really productive investments; how far they represent economic waste. The debts of the provinces and municipalities amount in round numbers to $500,000,000 more. These may fairly be considered in the main as in the nature of investments and in all probability, eventually if not now, they will be yielding a profit.

The total foreign investments of South America amount probably to some $6,000,000,000 to $7,000,000,000.[2] This sum is approximately divided—30 per cent Government debts (inclusive of Government railroads); 35 per cent private railroad debts; 35 per cent miscellaneous—mining, shipping, industrial, etc.

On the whole, therefore, it is perhaps fair to say that these interest obligations which are met by the shipment of goods, are in good part, from the strictly economic viewpoint, a fair equivalent for the goods shipped. The interest on the loans has been fully earned.

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[1] Estimated from South American Handbook of National Foreign Trade Council, New York City.

[2] Estimated from South American Yearbook and from statistics submitted to the International Statistical Congress, Paris, 1909, by Señor Alberto Martinez.

The same statement may properly be made with reference to the freights paid to the owners of foreign ships; while it is properly paid to foreigners, a reasonable equivalent has been received.

As has already been intimated many millions each year are sent abroad by immigrants and millions more are expenses of South American travelers in Europe. Remittances from immigrants represent, of course, more than an equivalent in the value of the labor expended in earning the money sent. In most cases, however, it would be better for the country if the earnings could be reinvested in South America itself. Expenses of travelers are sometimes, from the business viewpoint, excellent investments; frequently, while they may be good investments from the personal viewpoint as they bring enjoyment more than equivalent to the sum spent, they are often waste from the viewpoint of the country's development. Probably these invisible payments that I have indicated make up the total of the commercial merchandise balance, and the larger part of it may be said to be on the whole a profitable means of payment for the merchandise sent.

It should be noted that a new and developing country naturally passes through three stages of relative imports and exports as the country grows. At the beginning, if the outlook is promising, there will be a considerable excess of imports, brought in largely on credit as a means of profitable development and exploitation of the earliest available natural resources. In the second stage, the resources have already been so far developed that great exports of raw materials, grain, meats, the more valuable minerals, etc., are exported in quantities sufficient to pay for the machinery and manufactured goods required for the communities' use, and an additional amount sufficient to pay interest on the foreign obligations that have been incurred, freight charges due to the foreign merchant marine, expenses of travelers abroad, and other similar charges. In many cases also this surplus of exports pays for supplies of gold brought in to establish and maintain a sound currency system. The third stage is that already reached by the great manufacturing countries of Europe which have passed the debtor stage and reached that of the creditor, where they are loaning their capital abroad to so great a degree that they make their payments for the large excess of imports by offsetting against their purchases the interest and profits due on their foreign investments.

The leading countries of South America, it is important for us to note, have reached this second stage, in which their exports are exceeding their imports to a degree sufficient to pay all of their nominal obligations, and from time to time, as the need arises, to supply themselves from abroad with gold. This is a condition that is encouraging and one for American bankers and capitalists to keep well in mind. It indicates that in several of the countries of South America the conditions are already such as to make investments increasingly stable and secure.

These statements regarding the relations between South America and Europe have been necessary as a preliminary to a somewhat more careful statement of the relations between the United States and South America, where the conditions on the whole are decidedly peculiar, although it needs analysis of the exports and imports of the separate South American countries in order to understand the conditions. For example, if we take Chart I (p. 359) and Table 1, showing the exports to and the imports from South America as a whole in its trade with the United States, the United Kingdom, and Germany, we find that exports and imports in all of these countries from 1904–1913, inclusive, have been regularly increasing, and that in the case of all of the countries the

imports into these countries have exceeded their exports to South America by large amounts.

If we take Chart 2 (p. 361) and Table 2, however, showing the merchandise balance in favor of or against South America as a whole, and each one of the States of Brazil, Argentine, and Chile in their trade with the United States during the period from 1904–1914, we find that the line representing the balance of trade in favor of South America as a whole corresponds very closely with that representing the balance of trade in favor of Brazil, and that the balance in favor of Chile in its United States trade is only a small amount of from $5,000,000 to $10,000,000 a year, whereas the balance of the trade with the Argentine is against that country, but by only a small amount of from $10,000,000 to $20,000,000 on the average. It seems therefore, and a detailed study of the other countries will not materially change the statement, that the dominating country in determining our adverse balance of trade with South America is Brazil, and substantially Brazil alone. It sells to us on the average from $75,000,000 to $90,000,000 more a year than it buys from us. These chief exports are coffee and rubber, with, of course, large numbers of minor exports. The small balance in favor of Chile comes mainly from the large quantity of nitrates that it ships to us. On the other hand the balance against the Argentine in some years is far more than equaled by gold and silver that we have shipped them, although on the average, in addition to the gold and silver shipped, other articles of merchandise have likewise been added, chiefly binder twine, agricultural implements, iron and steel, lumber and oils.

It would seem, therefore, as if the specific problem which might interest our shippers who may be disturbed over our adverse balance of trade would be to make a very special effort to develop our market in Brazil, where we might pay for our coffee and rubber by direct shipments of goods instead of paying indirectly through goods sold to Great Britain and Germany. Under present conditions it is interesting to note that in 1911–12 Germany was supplying to Brazil some $2,500,000 worth of firearms and ammunition, as much more of cement, over $4,000,000 worth of machinery, more than $1,500,000 of wire, more than $1,250,000 in locomotives, and more than $3,500,000 in cotton goods. Along all these lines and many others there might well now be an opportunity for us to secure this trade. Along some of these lines the United Kingdom has also been a seller to even a greater degree than Germany, although in some lines she has sold somewhat less.

The time seems now to be ripe for the United States business men to take this step. We likewise are in the second stage of development already indicated. Already, under present conditions, we are apparently on the verge of passing into the third stage and becoming a creditor nation. Up to the present our great surplus of exports has come largely from the exportation of agricultural products, although for the last few years the percentage of raw materials as compared with manufactured products has been steadily decreasing. As the years go by we shall find our own demand for food products rapidly increasing with the supply tending at any rate to decrease. The kind of goods, therefore, that Europe has been heretofore demanding from us we shall probably not be so ready to supply as formerly, whereas we are becoming increasingly ready and eager to send abroad our manufactured products. A country like Brazil needs such products apparently more than do the further developed countries of Europe. If, therefore, our business men now seize this opportunity by providing, as they have begun to do, banking facilities; by studying more carefully South American customs so as to lessen the friction in trade—as, for example, adopting the metric system of weights and measures in that trade; by sending salesmen familiar with the languages of the countries

concerned and by sending sales literature in Portuguese or Spanish; by noting carefully their customs of packing, of credit, and so forth, we shall readily make this change, deal with Brazil direct as a profitable market, take the added profits that will come from the exchange business itself, and, incidentally, balance our trade directly instead of by a roundabout, three-cornered route.

In the study of the balance of trade the question of gold shipments has always been of special interest. The economists have stated generally that gold would be bought when it was needed and that its flowing back and forth to settle balances happened only to meet a demand for gold. The experience with South America seems to show that this is the case. The countries of South America are mostly not on a gold basis in quite the same sense that the leading countries of Europe and the United States are on the gold basis. In most of them the conditions are far from satisfactory, the money being largely paper, usually fluctuating as compared with gold. There have been some exceptions. Uruguay, for example, has for many years been careful to maintain its credit and keep its currency sound. There have been only slight changes in the value of the dollar as compared with gold since the notes have been backed by sufficient reserve. Even under the present war conditions the value of the currency has been maintained. In Chile the nominal value of the peso is about 36½ cents, but it has been inconvertible since 1898 and its value has fluctuated widely, so that it has fallen to about 20 cents. Although there has been in existence for many years a conversion fund accumulated with the idea of resuming specie payments, the step has not been taken, and the conversion fund is held largely in Europe rather than in Chile itself. In Brazil, although since 1906 there has been an office of conversion to receive gold and to issue in exchange circulating notes with the idea that there should be a parity of exchange established and maintained, nevertheless there has been circulating side by side with the notes of the office of conversion inconvertible paper notes with no definite provision made as to their redemption, and during the year 1913 gold was exported in rather large quantities. Before the war broke out arrangements were undertaken to improve the situation, but the effect of the war was to prevent their consummation. In the Argentine Republic, although it has also had its serious experience with paper currency, in 1899 an office of conversion was established to receive gold and issue in exchange demand notes to supply a circulating medium. The rate of conversion was fixed at 44 per cent of par. The Government has kept steadily in mind the necessity of obtaining and maintaining a stock of gold to secure this policy, and at present the proportion of gold in the office of conversion to the gold value of the outstanding paper is more than 70 per cent—a supply ample to secure the notes. Although the other countries of South America have had their large surplus of exports, the Argentine Republic is the country that has been steadily bringing in and accumulating gold.

Chart 3 shows the gold balances that have been shipped into South America during the past 10 years from the United States, Great Britain, and Germany. Although there have been shipments of gold into all the countries, especially from Great Britain to Brazil, it is primarily the Argentine, so far as the United States and Germany are concerned, that has imported and held on to the gold that she has needed to secure and maintain her currency system. Great Britain's experience also is enlightening. Although the exports of Great Britain to Brazil and Chile from 1904 to 1913 have slightly exceeded her imports from those countries, while her imports from the Argentine largely exceed her exports to that country, the shipments of gold from Great Britain to the Argentine have been only 6 per cent of exports to that country, whereas the proportion of gold

sent to Brazil and Chile has been 24 per cent to Brazil and 3 per cent to Chile. The merchandise balance seems to have little effect.

Not merely are these facts true as regards Great Britain but it is likewise true as regards Germany and the United States. The balance of trade against Germany of all South America has been somewhat larger than that against the United States, being made up largely of imports from Argentine, Brazil, and Chile. Germany has been exporting considerable gold, but primarily to the Argentine from 1908 to 1912. As an indication of the way in which Germany and England were importing gold reserves in the year preceding the outbreak of the war, it is interesting to note that both the Argentine and Brazil sent considerable gold (about $15,000,000) to Germany in 1913, although the balance of trade in that year was still heavily against Germany, while some $135,000,000 went to Great Britain. Uruguay, although the balance of her trade with Great Britain has been against her, has been taking as much if not more gold from Great Britain than either Argentina or Brazil. Another strong illustration of the fact that special conditions rule and not mere merchandise balances.

During the years 1904–1914 more than $100,000,000 were sent from the United States direct to the Argentine in gold, even though we have a favorable balance of merchandise trade with the Argentine and have regularly held this favorable balance thoughout the entire period.

On the other hand, although there has been a steady, large balance against the United States in favor of Brazil, we have shipped little gold to the latter country. All these facts seem to support the economists in their statement that gold is shipped to the country that wants it, and is prepared to pay for it, rather than being merely shipped, willy-nilly, to offset an adverse balance of trade.

It is unfortunate that there does not seem to be sufficient data available in New York to enable us to make the study more complete. But the study is still worth while. The results are, on the whole, rather surprisingly favorable to South America. The figures that we have secured with the charts indicate, as has been intimated, that a very considerable proportion of the shipments of merchandise to Europe is sent to pay interest on debts held abroad. But the debts have been largely made for good purposes and are paying.

The figures indicate that gold will go to the country that wishes to use it and that bids accordingly, and that gold shipments are not automatically sent merely to settle balances. South American countries can get needed gold when they adopt policies that demand it.

The studies also indicate that in the United States trade with South America the balances are fairly even with each of the important different countries excepting with Brazil, where the balance is heavily against us. There is nothing in the data to indicate exactly how we settle our balance with Brazil. We certainly do not ship her gold. The balance is, of course, settled, as every business man knows, by our shipments to a third country, chiefly England, which, in turn, makes its settlements with Brazil. We are thus paying for our Brazilian coffee and rubber with our wheat and corn and other raw products. All these indirect methods of settlement, of course, mean added trouble and added expense. The chief single method of improvement that we could make, as indicated by these trade balances, would be to stimulate very largely our exports direct to Brazil, and then to make them exports of manufactured goods that would help both Brazil and the United States.

In all the countries, however, we need to provide exchange facilities, so that also the profits from the exchange process itself would come to the United States rather than go through European countries.

REFERENCES TO STATISTICAL MATERIAL.

1. United States:
   - (*a*) Reports on "The Monthly Summary of the Foreign Commerce of the United States," 1904–1915.
   - (*b*) Annual Reports on "Foreign Commerce and Navigation of the United States," 1904–1915.
   - (*c*) "Statistical Abstract of the United States," 1904–1914.
2. United Kingdom:
   - (*a*) "Statistical Abstract of the United Kingdom in each of the last 15 years, 1899 to 1913." Sixty-first number.
   - (*b*) Exports consist of the produce and manufacture (exclusive of bullion and specie) of the United Kingdom consigned to each of the South American countries. Export values are "free on board" values, including cost and charges of delivery of goods on board ship.
   - (*c*) Imports consist of the total value of the merchandise consigned from various South American countries. The value of the imports represent cost, insurance, and freight; or when goods are consigned for sale, the latest sale value of such goods.
3. Germany:
   - (*a*) "Statistiches Jahrbuch für das Deutsche Reich," 1912–1914.
   - (*b*) "Statistiches Handbuch für das Deutsche Reich," 1907, vol. 2.
   - (*c*) All export and import figures are taken from "Der Spezialhandel nach Erdteilen und Landern."

TABLE 1.—*Balance of trade, South America and United States—Imports and exports of foreign and domestic merchandise.*

Calendar years.	Imports United States from South America.	Exports from United States to South America.	Balance.
1904	$140,059,439	$53,019,431	$87,040,008
1905	144,990,099	66,405,368	78,584,731
1906	147,941,781	78,822,379	69,119,402
1907	147,680,943	85,612,408	62,068,535
1908	132,431,434	76,597,635	55,833,799
1909	193,202,131	83,509,838	109,692,293
1910	189,466,428	100,303,616	89,162,812
1911	187,514,969	121,736,604	65,778,365
1912	233,731,035	138,944,930	94,786,105
1913	198,259,005	146,514,635	51,744,370
1914	229,520,375	91,013,339	138,507,036
Total	1,941,797,639	1,042,480,183	902,317,456

Merchandise exports, imports, and balance of trade, South America and Germany.

[Million marks.]

Calendar years.	Exports to Germany.	Imports from Germany.	Balance.
1904	673.8	253.6	420.2
1905	792.4	314.7	477.7
1906	796.4	394.4	401.0
1907	885.1	448.5	436.6
1908	867.1	346.8	520.3
1909	923.8	382.6	541.2
1910	908.2	497.4	410.8
1911	988.6	582.3	406.3
1912	1,123.5	643.8	480.7
1913	1,101.2	663.7	437.5
Total	9,061.1	4,528 8	4,532.3

Merchandise exports and imports, and balance of trade, South America with United Kingdom.

[In pounds sterling.]

Calendar years.	Exports to United Kingdom.	Imports from United Kingdom.	Balance.
1904	39,634,128	24,591,530	15,042,598
1905	44,057,429	28,792,470	15,264,959
1906	42,594,659	38,770,584	3,824,075
1907	47,333,809	42,161,320	5,172,489
1908	55,536,849	34,636,849	20,900,000
1909	56,787,874	37,479,491	19,308,353
1910	59,799,753	48,813,615	10,986,138
1911	51,000,551	44,069,476	6,931,075
1912	64,722,511	46,991,915	17,730,596
1913	68,156,896	48,814,061	19,342,835
Total	529,614,462	396,111,314	134,503,148

TABLE 2.—*Merchandise exports, imports, balance of trade, Argentina, Brazil, Chile, with United Kingdom.*

[In pounds sterling.]

ARGENTINA.

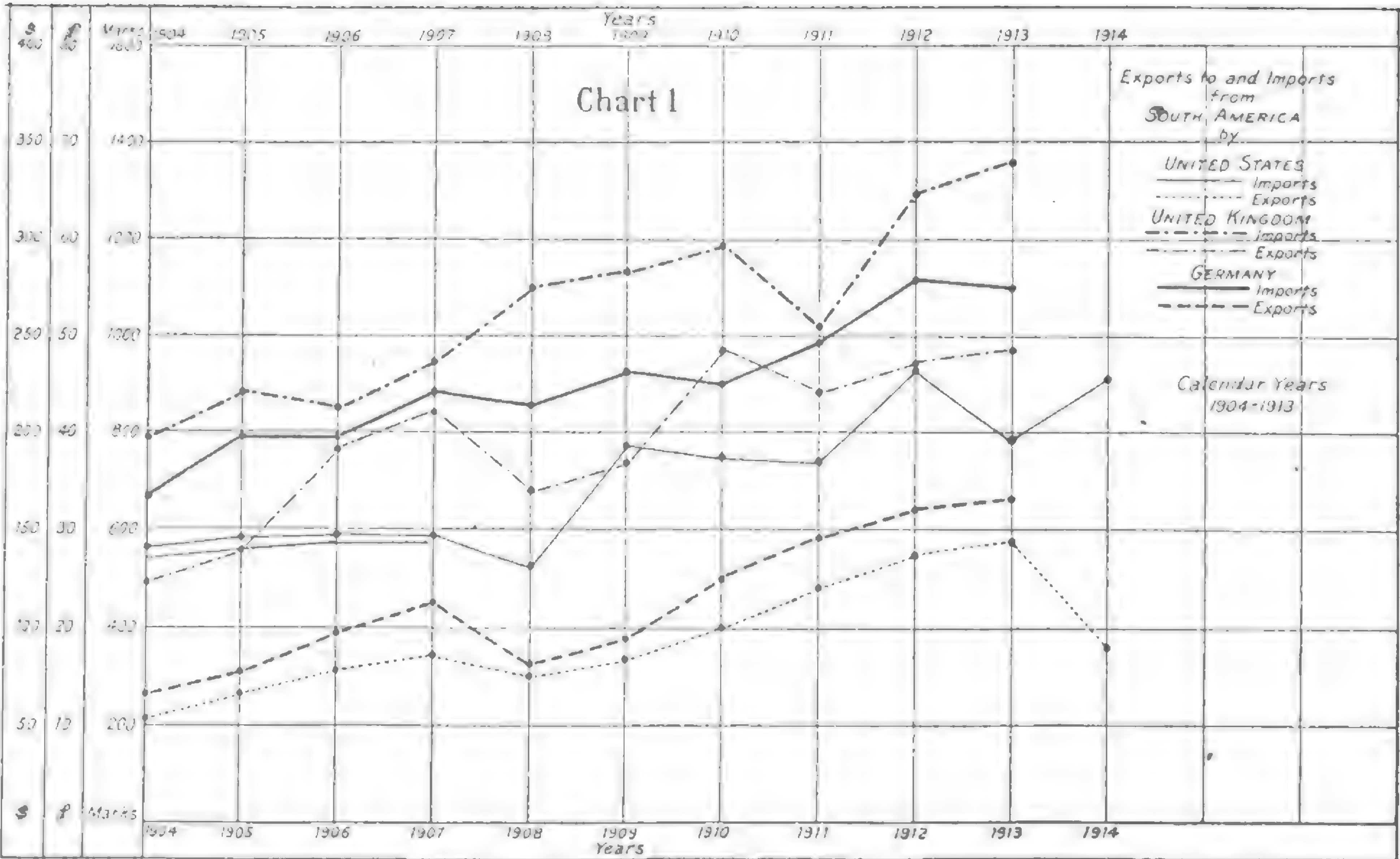
Calendar year.	Exports.	Imports.	Balance.
1904	23,407,176	10,844,615	+ 12,562,561
1905	25,430,163	12,997,341	+ 12,432,822
1906	23,921,892	19,425,772	+ 4,496,120
1907	26,654,986	17,794,870	+ 8,860,116
1908	35,985,536	16,404,148	+ 19,581,389
1909	32,717,295	18,684,134	+ 14,033,161
1910	29,009,738	19,097,210	+ 9,912,528
1911	27,289,480	18,602,471	+ 8,687,009
1912	40,807,685	20,549,853	+ 20,257,832
1913	42,485,391	22,640,921	+ 19,844,470
Balance			+130,668,008

BRAZIL.

1904	6,433,672	5,975,084	+ 458,588
1905	8,246,873	6,613,378	+1,633,495
1906	9,188,060	7,626,867	+1,561,193
1907	9,755,967	10,223,561	− 467,594
1908	6,984,977	8,115,197	−1,130,220
1909	11,290,126	8,470,582	+2,829,544
1910	17,496,568	16,426,985	+1,069,583
1911	16,864,006	11,938,455	−1,074,449
1912	9,360,139	12,657,830	−3,297,691
1913	10,008,367	12,465,115	−2,456,748
Balance			− 874,290

CHILE.

1904	5,127,360	3,224,569	+1,902,791
1905	5,371,216	4,394,599	+ 976,617
1906	5,060,122	5,961,929	− 901,807
1907	5,168,512	7,223,578	−2,055,016
1908	6,663,489	3,866,440	+2,802,049
1909	5,508,589	4,632,022	+ 876,567
1910	5,181,737	5,479,556	− 297,819
1911	4,336,878	6,139,319	−1,802,541
1912	4,982,185	6,159,159	−1,157,334
1913	5,359,335	6,010,481	− 651,146
Balance			− 316,639


Chart I
Exports to and Imports from South America by
United States
Imports
Exports
United Kingdom
Imports
Exports
Germany
Imports
Exports
Calendar Years 1904-1913
Years
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
$
£
Marks
350
300
250
200
150
100
50
70
60
50
40
30
20
10
1400
1200
1000
800
600
400
200

Merchandise exports, imports, balance of trade, Argentina, Brazil, and Chile, with United States.

ARGENTINA.

Calendar year.	Exports.	Imports.	Balance.
1904	10,750,862	20,702,413	− 9,951,551
1905	17,053,166	28,429,200	− 11,376,034
1906	18,291,368	33,271,569	− 14,980,201
1907	16,171,129	30,111,672	− 13,940,543
1908	13,155,468	33,519,955	− 20,364,487
1909	27,080,231	36,287,201	− 9,206,970
1910	32,050,322	42,776,982	− 10,726,660
1911	28,446,296	50,140,438	− 19,694,142
1912	34,007,864	51,170,397	− 17,162,533
1913	25,575,667	54,890,415	− 29,404,748
1914	56,274,246	27,127,958	+ 29,146,288
Balance	....	....	−127,641,581

BRAZIL.

Calendar year.	Exports.	Imports.	Balance.
1904	94,673,789	10,724,389	+ 83,949,900
1905	90,548,008	12,351,236	+ 78,196,772
1906	86,476,939	16,547,375	+ 69,929,564
1907	85,436,070	21,002,566	+ 64,433,484
1908	81,039,224	16,973,977	+ 64,065,247
1909	117,062,725	19,765,836	+ 97,296,889
1910	103,716,231	24,988,377	+ 78,727,854
1911	103,464,111	28,853,819	+ 74,610,292
1912	132,957,326	40,591,519	+ 92,365,807
1913	100,947,735	39,901,203	+ 61,046,532
1914	95,000,622	23,275,894	+ 71,724,728
Balance	....	....	+836,356,509

CHILE.

Calendar year.	Exports.	Imports.	Balance.
1904	10,896,564	5,202,890	+ 5,693,674
1905	14,020,884	7,006,877	+ 7,014,007
1906	18,146,232	9,392,453	+ 8,753,779
1907	17,944,580	11,439,821	+ 6,504,759
1908	12,494,122	5,373,911	+ 7,120,211
1909	16,700,994	6,787,537	+ 9,913.457
1910	20,381,158	9,991,278	+10,389.880
1911	20,230,463	14,934,955	+ 5,294,508
1912	22,297,192	15,303,738	+ 6,993,454
1913	29,553,823	16,616,912	+12,936,911
1914	24,238,713	13,627,618	+10,611,095
Balance	....	....	+91,225,735

Merchandise exports, imports, balance of trade, Argentina, Brazil, and Chile, with Germany.

[Million marks.]

Calendar year.	Argentina.			Brazil.			Chile.		
	Exports.	Imports.	Balance.	Exports.	Imports.	Balance.	Exports.	Imports.	Balance.
1904	336.5	102.7	+ 233.8	156.7	56.6	+ 100.1	112.8	44.7	+ 68.1
1905	369.2	131.5	+ 237.7	172.4	71.7	+ 100.7	118.5	53.5	+115.0
1906	372.2	170.2	+ 202.0	188.1	88.8	+ 99.3	145.5	72.4	+ 73.1
1907	442.5	179.2	+ 263.3	196.0	104.1	+ 91.9	143.9	84.8	+ 59.1
1908	446.0	147.0	+ 299.0	198.6	84.5	+ 114.1	133.6	52.4	+ 81.2
1909	437.7	175.4	+ 262.3	234.3	91.8	+ 142.5	143.5	57.6	+ 85.9
1910	357.2	240.2	+ 117.0	278.9	121.7	+ 157.2	154.6	64.8	+ 89.8
1911	369.9	255.9	+ 114.0	320.0	152.0	+ 168.0	158.3	85.4	+ 72.9
1912	441.9	239.4	+ 205.5	313.2	192.8	+ 120.4	209.7	112.0	+ 97.7
1913	494.6	265.9	+ 228.7	247.9	199.8	+ 48.1	199.8	97.8	+102.0
			+2,163.3			+1,142.3			+844.8

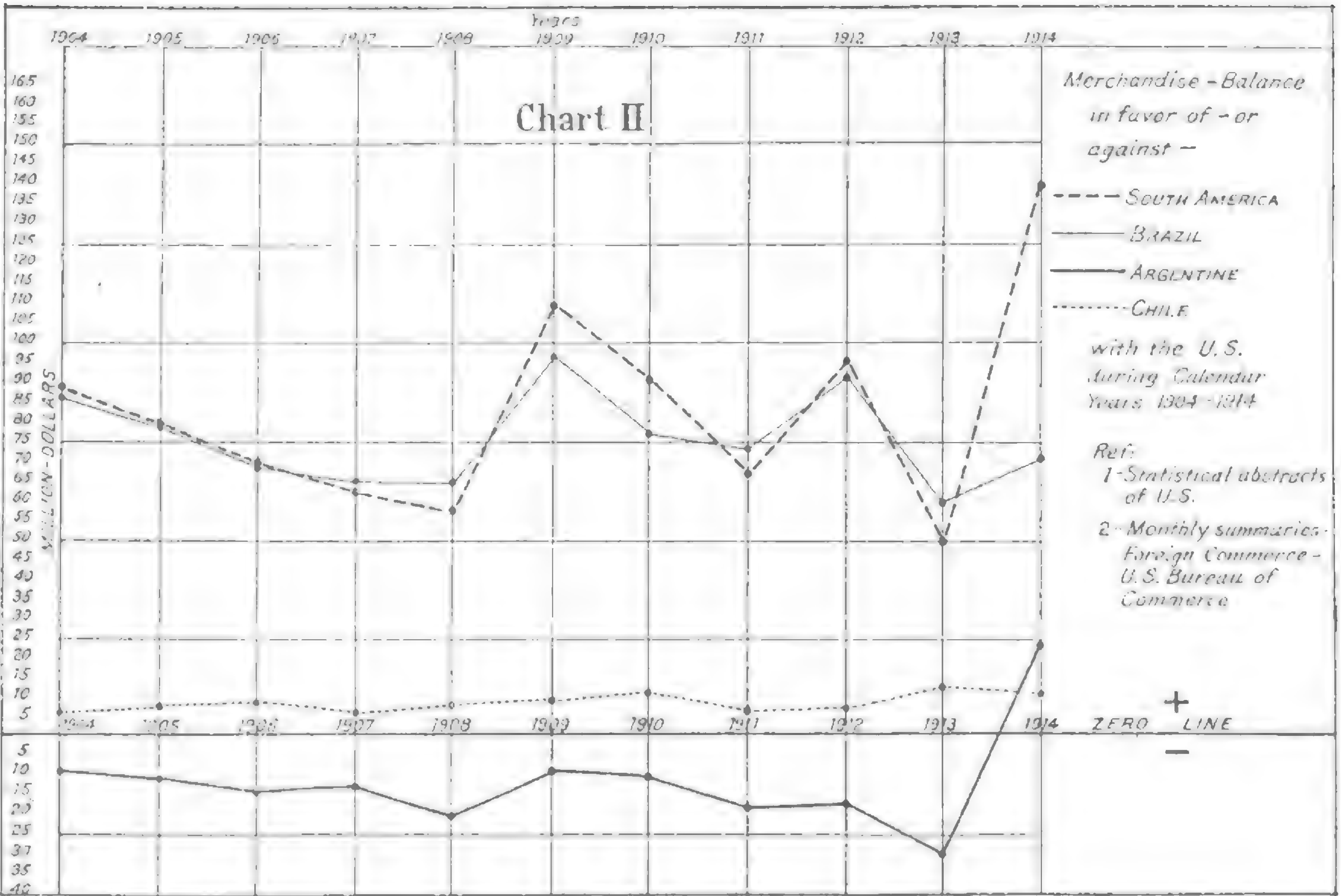

Chart II
Years
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
MILLION - DOLLARS
Merchandise - Balance in favor of + or against -
South America
Brazil
Argentine
Chile
with the U.S. during Calendar Years 1904-1914
Ref:
1-Statistical abstracts of U.S.
2-Monthly summaries Foreign Commerce - U.S. Bureau of Commerce
+
ZERO LINE
-

TABLE 3.—*Imports from and exports to South America by the United States.*

[In dollars of gold and silver.]

Calendar year.	Imports.		Exports.	Balance.	Argentina's imports, fiscal years.
	Gold.	*Silver.*	*Gold.*	*Gold.*	*Gold.*
1904	1,133,813	179,456	7,796,565	− 6,662,752	2,750,000
1905	1,776,978	153,708	8,034,318	− 6,357,340	11,500,000
1906	5,799,316	331,179	4,122,390	+ 1,676,926	3,875,000
1907	6,374,479	1,861,143	1,343,744	+ 5,030,735	1,125,000
1908	6,128,951	2,382,124	1,298,176	+ 4,830,775	500,000
1909	4,976,437	2,214,045	59,961,102	−54,984,665	23,432,440
1910	4,974,990	2,427,328	8,711,922	− 3,736,932	28,655,000
1911	6,186,531	4,984,990	3,465,136	+ 2,721,395	....
1912	7,581,942	3,707,355	9,869,146	− 2,287,204	10,070,000
1913	9,285,918	3,553,772	22,408,708	−13,122,790	21,000,000
1914	8,364,105	3,419,619	1,771,083	+ 6,593,022	....
Balance[1]	....	....	....	−66,188,830	102,937,440

[1] Against United States.

Imports from and exports of gold and silver to countries of South America by Germany.

[Million marks.]

Country.	Imports.						Exports.					
	1908	1909	1910	1911	1912	1913	1908	1909	1910	1911	1912	1913
Argentina	.3	1.1	.4	.1	.1	44.9	.6	29.8	43.3	16.7	38.7	12.5
Brazil	......	.1	......	......	.1	15.4	.1	8.5	1.1	.1	......	.2
Chile	.2	.1	......	......	......	.1	......	......	......	......	......	......
Total	.5	1.3	.4	.1	.2	60.4	.7	38.3	44.4	16.8	38.7	12.7

Total exports (million marks) 151.6
Total imports (million marks) 62.9

Balance against Germany 88.7

Declared value of registered exports of gold and silver bullion and specie from United Kingdom to countries of South America.

[In pounds sterling.]

EXPORTS.

[Statistical abstract for United Kingdom, 61-62 vols., p. 262.]

	1904	1905	1906	1907	1908
To—					
Columbia	84	....	29,493	59,290	20,314
Peru	177,650	184,256	351,181	290,995	2,511
Chile	13,460	117,000	200,750	68,500	33,000
Brazil	724,025	2,145,356	2,876,166	3,908,016	426,533
Uruguay	4,082,250	2,665,896	2,285,000	2,199,300	4,736,220
Argentina	1,116,737	2,110,170	2,001,404	1,370,092	1,742,270
Total	6,144,206	7,222,678	7,743,994	7,896,193	6,960,848

IMPORTS.

	1904	1905	1906	1907	1908
From—					
Columbia	426,871	192,160	109,091	163,019	210,170
Chile	59,881	58,534	67,422	70,616	98,974
Brazil	443,605	406,599	369,535	396,917	443,700
Uruguay	650	500	....	125,250	410
Argentina	3,950	1,407	552,013	129,272	21,468
Total	934,957	659,200	1,098,061	885,074	774,722
Balance	5,209,249	6,663,478	6,645,933	7,011,119	6,186,126

Total exports 69,282,835
Total imports 17,382,671

Balance against United Kingdom 51,870,164

Declared value of registered exports of gold and silver bullion and specie from United Kingdom to countries of South America in pounds sterling.

EXPORTS.

[Statistical abstract for United Kingdom, 61-62 vols., p. 262.]

	1909	1910	1911	1912	1913
To—					
Colombia		57,250	75,172	93,460	105,115
Peru	112,100	502,500	155,500	193,000	367,470
Chile	61,300	275,005	500,000	82,500	200,000
Brazil	3,097,646	1,921,000	4,718,590	4,232,522	1,097,315
Uruguay	3,880,500	1,351,015	620,541	1,294,881	1,920,000
Argentina	4,112,604	581,559	505,630	914,858	1,254,823
Total	11,264,150	4,688,329	6,575,433	6,812,281	4,944,723

IMPORTS.

	1909	1910	1911	1912	1913
From—					
Colombia	162,542	228,015	239,803	175,138	184,632
Chile	61,363	45,529	35,555	38,737	36,158
Brazil	530,061	1,247,215	1,582,741	552,811	4,009,176
Uruguay		2,216	8,930	12,020	818,385
Argentina	4,925	2,627	4,485	27,000	3,020,593
Total	758,891	1,525,602	1,871,514	805,706	8,068,944
Balance	10,505,259	3,162,727	4,703,919	6,007,575	−3,124,221

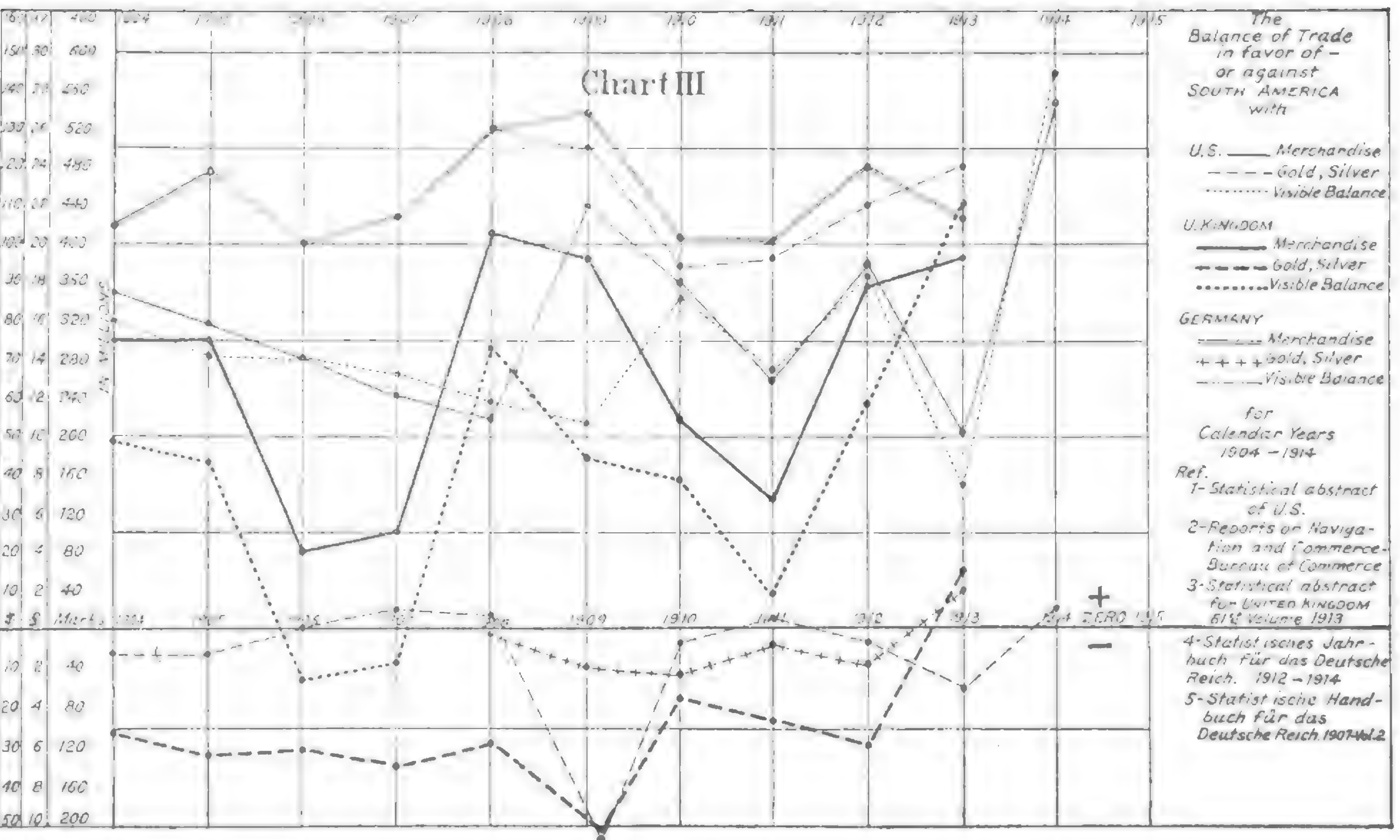
TABLE 4.—*Total balance of trade (merchandise) in favor of South America with Germany, United States, and United Kingdom.* (See Chart III, p. 364.)

Calendar year.	United States.	United Kingdom.	Germany.
			Million marks.
1904	$87,040,008	£15,042,598	420.2
1905	78,584,731	15,264,590	477.7
1906	69,119,402	3,824,075	401.0
1907	62,068,535	5,172,489	436.6
1908	55,833,799	20,900,000	520.3
1909	109,692,293	19,308,383	541.2
1910	89,162,812	10,986,138	410.8
1911	65,778,365	6,931,075	406.3
1912	94,786,105	17,730,596	480.7
1913	51,744,370	19,342,835	437.5
1914	138,507,036		
Total	902,317,456	134,503,148	4,532.3

Total merchandise, balance in favor of South America=$2,684,000,000, 1904–1914.

The CHAIRMAN. I am sure we have to thank Prof. Jenks for his very able paper. He has gone at great length and with great detail into the balance of trade between South American countries and the United States, and has shown to us how South America must not be regarded as a unit but as individual countries, each of them trading with this country, and that which applies to one does not necessarily apply to another. His paper will be read, I am sure, by all people interested in this economic question with great interest and pleasure.

I now beg to call upon Dr. Antonio Ramirez Fontecha, of Honduras, who will address us on the subject of taxation. Dr. Fontecha addressed the section in Spanish. (Remarks not reported.)


Chart III
The Balance of Trade in favor of – or against SOUTH AMERICA with
U.S. Merchandise
Gold, Silver
Visible Balance
U.KINGDOM
Merchandise
Gold, Silver
Visible Balance
GERMANY
Merchandise
+ + + + Gold, Silver
Visible Balance
for Calendar Years 1904 – 1914
Ref.
1- Statistical abstract of U.S.
2-Reports on Navigation and Commerce Bureau of Commerce
3-Statistical abstract for United Kingdom 61st Volume 1913
4-Statistisches Jahrbuch für das Deutsche Reich. 1912 – 1914
5-Statistische Handbuch für das Deutsche Reich 1907 Vol. 2
1904
1909
1910
1911
1912
1913
1914
1915
ZERO
+
–
Marks
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The CHAIRMAN. We have to thank Dr. Fontecha for his remarks. He has spoken on the question of taxation in his country (Honduras), and laments that one of the principal taxes is the tax on alcohol, which brings a revenue of over $2,000,000 silver, which is probably 40 per cent of the total internal revenues of the country, and he considers that by having that taxation, which is not heavy enough to thwart the drink habit, increased, it would be better for the State to increase it to such a prohibitive point that it would do away with the intemperance which is so prevalent in so many of the countries in the world. He states that at the time the resolutions are presented he will present a resolution to that effect, calling upon his Government and other Governments to do everything in their power to prohibit that evil by increasing the tax on alcoholic beverages so as to reduce drunkenness and intemperance throughout his country and other countries.

I now wish to call on Prof. Chester Lloyd Jones, of the University of Wisconsin, at Madison, who will give us his paper on the "Effects of the war on Latin-American finance."

THE EFFECTS OF THE WAR ON LATIN-AMERICAN FINANCE.

By CHESTER LLOYD JONES,
Professor of Political Science, University of Wisconsin.

So widespread a conflict as the present war in Europe was sure to affect financial conditions in Latin America as elsewhere. All trans-oceanic trade would suffer interruption until the control of the seas was decided. Some markets would be cut off; European credits—relied upon for the operation of industries—would be curtailed. As a result exports would fall. Imports, due to the lessened buying capacity of the people, would decrease and with them the Government income from customs. The difficulties of private finance would thus be promptly reflected in the public income.

Looked at from a broader point of view the effect of the war on the public finance of the American States is not only a matter of local national concern. It is a subject of continental interest since it shows the degree to which these States are dependent on European powers, not politically but economically. There may be, to quote a phrase familiar in the United States because of its use in Washington's farewell address, "entangling alliances" of an economic as well as of a political nature.

Economic dependence has not infrequently been the gateway through which foreign influences have entered to question the national sovereignty. The financial strength or weakness of the various nations might become an important factor in determining whether it would be possible to maintain that policy which has been so happily phrased by a Latin-American writer as "America, the continent for the Americans of the continent." If in this period of financial strain, therefore, American States show themselves able to stand alone or to stand together it will be a matter for mutual congratulations.

The response made by the Latin-American States to the demands of the situation showed a general determination to do all that was possible to maintain the national credit. The foreign-debt service, especially, it was felt, must be

provided for on the usual basis. In Brazil,[1] even before the war, conditions were such that it was considered "obvious that without financial relief the Government would be unable to meet its external obligations."[2] The war only accentuated the financial troubles already prevalent because of hard times.[3] The export trade of 1914 was less than two-thirds that of 1912. The loss was due, of course, primarily to the cutting off of direct shipments to Germany and Austria.[4] Public income from import and export duties suffered a sharp decline. The value of the milreis declined from 32 cents United States gold in June, 1914, to 20 cents in October.[5] On March 4, 1915, to meet the crisis the President promulgated a decree authorizing the minister of finance to issue bonds to the amount of 50,000,000 milreis gold ($27,300,000), but the efforts did not succeed in relieving the business interests generally in the first months of 1915.

Gradually thereafter, however, conditions improved. In Bahia the cocoa crop and other agricultural exports had brought good prices. The war stimulated sugar prices, and the exports of that product increased tenfold in value, bringing prosperity to the Pernambuco region. The coffee trade also improved. In fact, by September, 1915, it was reported that Brazil's chief exports were no longer suffering greatly from the European conflict. To be sure, no exports were made direct to Germany, Austria-Hungary, and Belgium, but shipments to Denmark, Norway, and Sweden rose 489 per cent, and those to the Netherlands were twice as great. Still financial conditions in Brazil are even now not satisfactory. Brazil is doubtless the hardest hit of the larger South American States.[6]

Like her neighbors to the north and south, Uruguay was already suffering from the results of a financial crisis in 1914, and the war increased the hardships, though the fact that banks and business houses were already retrenching lessened the shock. Still money became tight and unemployment increased. Local moratoria were resorted to,[7] but no international moratorium was declared.[8] The Government was authorized to contract an internal debt of 3,500,000 pesos, later raised to 4,000,000 pesos, at 8 per cent interest.[9] Negotiations for a European loan failed.[10]

The close of the fiscal year 1914–15 showed customs receipts the lowest in 10 years and about two-thirds as great as the year before;[11] but toward the middle of 1915 conditions improved, and in September the Government discontinued the negotiations for a United States loan of $10,000,000.

Argentina, the most important commercially of the South American States, met the crisis with commendable determination. The country had gone through a boom period which came to a close about two years before the outbreak of the war. Had it come while the Republic was in the midst of the

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[1] Further details for Brazil and other South American countries are found in Jones, Chester Lloyd, War and Public Finance in South America. Journal of Political Economy, Vol. XXIII, No. 8, October, 1915, pp. 791–806.

[2] Forty-first Annual Report of the Council of the Corporation of Foreign Bondholders for the year 1914. London, 1915, p. 12.

[3] Daily Consular and Trade Reports, Sept. 12, 1914; Dec. 12, 1914; Commerce Reports, Supplement, May 12, 1915 (dated Apr. 6, 1915).

[4] Commerce Reports, Mar. 26, 1915.

[5] Commerce Reports, supplement, May 12, 1915 (dated Apr. 6, 1915).

[6] The Americas, Vol. I, No. 11, August, 1915, and Commerce Reports, Aug. 3, 1915.

[7] Daily Consular and Trade Reports, Nov. 19, 1914.

[8] Commerce Reports, June 11, 1915, and Apr. 3, 1915.

[9] Daily Consular and Trade Reports, Nov. 26, 1914.

[10] Daily Consular and Trade Reports, Nov. 20, 1914. See also Commerce Reports, Apr. 3, 1915.

[11] Commerce Reports, Aug. 30, 1915, and Sept. 1, 1915.

speculation period it would have produced a disastrous crash. Even under the existing conditions a moratorium, later confined to foreign payments, was at once declared. The exportation of gold was forbidden and the Government extended its aid to private banks to tide them over the crisis. There was a wide demand for the issue of $10,000,000 in paper money without a gold guaranty, but this the Executive refused to support.[1] Customs here, as elsewhere, fell off. Early in 1915 they were reported as 60 per cent below normal.[2] A policy of rigid retrenchment was adopted.[3] The negotiations for a European loan of $77,000,000 for public works were dropped[4] and public improvements discontinued.[5] Subsequently salaries of Government employees were cut. The budget for 1915 included new taxes on such items as alcoholic liquors and tobacco.[6] Later a tax on sugar was added.[7]

Aided by these conservative measures commerce gradually improved. At the end of two and a half months of war foreign trade as a whole was in "fair" condition.[8] By the end of the year crop prospects had become good, there was plenty of work, and shipping was almost normal.[9] An issue of $15,000,000 in Government notes was promptly disposed of.[10] The National City Bank of New York made a loan to the Government in December, 1914, at 6 per cent interest, the obligation being taken at 96½.[11] In May, 1915, an exterior loan of $50,000,000 gold was successfully floated with British and American bankers,[12] and an internal loan of $60,000,000 paper pesos was taken almost entirely by local financiers. In the opening months of 1915 ample funds were available for all foreign trade purposes. Local banks, both Argentine and European, were making attractive rates for loans, the charge being in some cases as low as 6½ per cent. Commerce was decidedly on the upgrade.[13]

Of peculiar interest is the effect of the war upon the financial affairs of Chile. Chile depends on the export taxes on nitrate and iodine for its ready cash. Of customs, about 58 per cent comes from these items. The import and export taxes from the two nitrate ports of Iquique and Antofogasta constitute 65 per cent of the Government's customs revenues.[14] Of the nitrate exports over three-fourths found their market in Europe. As an indirect result of the Balkan wars the demand slackened and the price had been steadily declining since the beginning of 1914.[15] The war cut off shipments to Germany, Austria-Hungary, and southeastern Europe, and the bottom dropped out of the market. Operations could no longer be worked at a profit. There were 134 establishments working on July 31, 1914, but only 69 on September 30, 61 on October 16, and 46 in December, 40 in February, 1915, and 36 in March. Government revenues reflected the bad commercial conditions and there was a serious deficit at the end of the fiscal year.[16]

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[1] Commerce Reports, Apr. 17, 1915, and June 12, 1915.

[2] Daily Consular and Trade Reports, Oct. 31, 1914, and Commerce Reports, Jan. 4, 1915, and Mar. 19, 1915. Further detailed figures are found in Commerce Reports for June 12, 1915.

[3] Commerce Reports, July 12, 1915, Oct. 6, 1915 (dated Aug. 13).

[4] Ibid., Mar. 19, 1915, and June 12, 1915.

[5] Ibid., May 5, 1915.

[6] Ibid., July 12, 1915.

[7] Ibid., Oct. 6, 1915.

[8] Ibid., Supplement, Mar. 19, 1915.

[9] Ibid., Jan. 4, 1915.

[10] Ibid., Jan. 7, 1915; see also Apr. 6, 1915.

[11] Ibid., May 5, 1915, and June 12, 1915.

[12] The Americas, I, No. 11, August, 1915, p. 18.

[13] Commerce Reports, June 12, 1915, and Sept. 23, 1915 (dated Aug. 13).

[14] Daily Consular and Trade Reports, Dec. 9, 1914.

[15] Ibid., Sept. 25, 1914.

[16] Commerce Reports, Supplement, Aug. 19, 1915.

Local industries other than nitrate production were but little affected. They did not manufacture for export and produced local necessities only. In mercantile lines the number of persons employed was reduced and the employment market generally was depressed.[1]

As in Argentina prompt measures were taken to meet the emergency. A moratorium was established without delay. United States consuls reported in the latter half of 1915 that it was not possible to estimate its continuance. Government salaries above $730 per year were cut at a progressive rate. The banks were allowed to obtain treasury notes up to 50 per cent of their capital by depositing bonds as guaranty. Paper money was issued and increased coinage of silver authorized. New direct taxes were placed upon both urban and rural real estate and an export tax of $2.43 per metric ton was put on boric acid for two years, to be raised to $3.65 thereafter.[2]

Meanwhile the local problem in the nitrate Provinces demanded attention. Outside the towns the Provinces of Antofagasta and Tarapacá are a rainless, barren desert. There is no vegetation and there are no settlements except at the nitrate stations, 20 to 50 miles apart. Food supplies have to be brought from great distances; cattle from the Argentine; sugar from Peru; grain, vegetables, and fruits from southern Chile. Much of the flour comes from the United States.[3] When the works closed down the laborers had to be supported by public or private charity or taken out of the district. The Government aided by supplying food and transportation.[4]

Under the strain of unusual circumstances the Chilean paper peso, worth 20 cents gold in July, 1914, sank to 15 cents in November.[5] The Government advanced money to the nitrate plants which would keep open and thus diminish the number of dependents.[6] Toward the end of 1914 conditions began to improve. The nitrate market was slowly recovering. The plants were opened again.[7] Purchases of high-grade nitrate for manufacture of explosives, especially by United States buyers, grew rapidly.[8] The local press reported that the Dupont Nitrate Co. alone had purchased Taltal nitrate to the value of $3,250,000 in United States currency.[9] Exchange again came to have a firm basis; money which had been hoarded by the banks began to come out; and import trade improved.[10]

The other Republics of South America are less active commercially, but from the point of view of international relations their experience is of special interest because it is in them and the countries of the Caribbean region that political and financial affairs are likely to be least stable, and on that account more likely to invite European interference.

Of the two inland Republics, Bolivia and Paraguay, Bolivia fared by far the better. The Government imports fell off 50 per cent and the annual budget was cut 30 per cent to meet the decrease in revenues.[11] A moratorium was

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[1] Commerce Reports, Aug. 19, 1915.

[2] Commerce Reports. Supplement, Aug. 19, 1915.

[3] Daily Consular and Trade Reports, Sept. 25, 1914.

[4] Ibid., Dec. 9, 1914, and Commerce Reports, Jan. 14, 1915.

[5] Commerce Reports, Jan. 14, 1915.

[6] Ibid., Apr. 14, 1915; July 3, 1915; July 29, 1915 (dated July 1, 1915); and Supplement, Aug. 19, 1915.

[7] Ibid., May 6, 1915.

[8] Ibid., Sept. 18, 1915 (dated Aug. 6); Sept. 21, 1915 (dated Aug. 19, 1915); and Oct. 7, 1915.

[9] Ibid., Sept. 21, 1915.

[10] Ibid., Sept. 18, 1915 (dated Aug. 6, 1915).

[11] Ibid., Jan. 6, 1915.

declared which was later extended to December 31, 1915.[1] But by the end of 1914 business was reported as fairly prosperous.[2]

In Paraguay it is difficult to ascertain what was the effect of the war upon public finance, for the Government is in such a weak financial position that it is impossible to distinguish the crises which were induced by the war from those to which the country would have been subject, even had peace been maintained. From a commercial point of view Paraguay is a dependency of Argentina and had been suffering the hard times there prevalent. The currency is greatly depreciated; in fact local metal coins are unknown except as curiosities. Very little metal money has ever been coined.[3] Of paper there is plenty; how much is not definitely known, but there is at least $65,000,000 outstanding.[3] The paper peso was worth $0.06225 in 1914. An effort to stabilize the currency was made in 1908, when a private bank was chartered into whose charge were to be given the proceeds of a tax of $1 on each hide exported. The Government was to receive 10 per cent of the profits of the bank and the hide tax. The proceeds were to be made a fund for the conversion of the paper money at the rate of 10 to 1.

But the war threw these plans to the winds. On October 24, 1914, an agreement was reported by which the Government was to take over the accumulated conversion fund amounting to $1,500,000.[4] Negotiations for a loan which were going on in London were dropped.[5] A moratorium was declared,[6] and 35,000,000 pesos additional paper authorized, which could not fail further to embarrass public finance.[7] The generally dark financial prospects of Paraguay have been made still darker by the war. In fact the conflict has probably only hastened the advance into a condition which was already highly unfortunate.

Peru, Colombia, and Venezuela may be grouped together as to the effect that the war had upon them, because, though not in positions of financial strength, they stood the shock fairly well. To some degree this was due to the fact that the Governments made strenuous efforts to maintain their credit, but in greater degree it was due to the character of their chief export products, which, once the first crisis was passed, put them in a favored position. In Peru at the outbreak of war gold was almost driven out of circulation. Business fell off 50 per cent[8] and public revenues as much. To meet the situation new export taxes were levied on sugar, wool, cotton, and hides.[9] The export trade in most lines fortunately did not depend on the closed European markets, and where it was so dependent alternative markets offered themselves. Of the eight principal exports cotton alone suffered seriously. Issues of paper money were resorted to by local banks, which caused the exchange rate to rise;[10] but for a country in the economic position of Peru the strain of the war was felt comparatively little.

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[1] Commerce Reports, Jan. 6, 1915; Feb. 12, 1915; May 10, 1915; and July 7, 1915.

[2] Daily Consular and Trade Reports, Oct. 12, 1914, and Dec. 2, 1914.

[3] Commerce Reports, Jan. 26, 1915.

[4] Ibid., Jan. 12, 1915.

[5] Ibid., Jan. 26, 1915.

[6] Ibid., Jan. 28, 1915.

[7] Ibid., Mar. 19, 1915, and Apr. 3, 1915. The Government was able to meet the payment on its external debt due Jan. 1, 1915. Forty-first Annual Report of the Council of the Corporation of Foreign Bondholders, 1915, p. 22.

[8] Ibid., Supplement, July 27, 1915.

[9] Ibid., Oct. 14, 1915 (dated Oct. 7, 1915).

[10] Ibid., Jan. 6, 1915, and May 8, 1915. See also on Peru, Ibid., Supplement, July 27, 1915, and Aug. 28, 1915.

In Colombia the war at first brought stagnation of trade, but the Government made earnest efforts to maintain its credit and was able to meet the payments of interest falling due in the foreign debt service.[1] By June 30, 1915, conditions were reported to be "returning to normal."[2]

Venezuela made efforts to avoid even the declaration of a moratorium. Toward the end of the year it was reported about to yield,[3] but the "foreign payments of the Government" were met with only slight delay.[4] The position of Venezuela in general seemed about that of Colombia.[5]

Curiously the war had less effect upon the weak Government of Ecuador than upon any other South American State. Torn by civil dissensions for almost a year before the beginning of the European conflict, and, dependent for practically all of her manufactured products upon Europe and North America, it might be assumed that the interruption of trade and disturbance of credit would have prostrated her already hard-beset Government. But no such development occurred. There were runs on banks at the beginning of the war and the Government declared a moratorium,[6] but by the end of the year cocoa prices were high and going higher. The market for this, the country's chief export, had practically recovered from the war slump.[7] A report dispatched December 14, 1914, declared that Ecuador's trade was practically as good as ever[8]—a condition which has continued.[9]

The effect of the war on the Caribbean Republics, Central America, and Mexico was less serious than in South America. Mexico was affected but little. The revolution had already paralyzed trade and credit. Throughout the country paper money had practically driven out metallic coins. There were reported to be $800,000,000 worth in circulation of many varieties, of which not a few were extensively counterfeited.[10]

Haiti shows a similar picture. Three years of internal disturbance had already sapped the country's strength when the war in Europe broke out.[11] The greater portion of the chief export crop (coffee) could not be harvested, and the Government thus lost one of its main sources of income—the export tax on this article.

The other Caribbean Republics, the Dominican Republic, and Cuba fared better. Communications between the former and the United States, the island's

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[1] Daily Consular and Trade Reports, Nov. 21, 1914, quoting the Financier and Bullionist for Sept. 3, 1914. See also for general discussion of Colombian finances, Forty-first Report of the Council of the Corporation of Foreign Bondholders, London, 1915, p. 16.

[2] Commerce Reports, June 30, 1915.

[3] Daily Consular and Trade Reports, Dec. 2, 1914.

[4] Commerce Reports, Supplement, July 2, 1915.

[5] For figures of trade for 1913 and 1914, see Commerce Reports, July 7, 1915. The loss was especially great in commerce with Germany, France, and Austria. See also Commerce Reports, Jan. 5, 1915; Oct. 5, 1915 (dated Sept. 2, 1915), and Forty-first Annual Report of the Council of the Corporation of Foreign Bondholders for the year 1914. London, 1915, p. 18.

[6] Daily Consular and Trade Reports, Oct. 31, 1914.

[7] Commerce Reports, Jan. 7, 1915. The price for superior cacao in December was $9 per quintal. In January it was $10, and in February orders were placed at $12 (Commerce Reports, Apr. 20, 1915). See also Commerce Reports, Jan. 18, 1915, and Oct. 12, 1915.

[8] Ibid., Jan. 18, 1915.

[9] Ibid., May 20, 1915. The interest and sinking-fund payments for the external debt due Jan. 1, 1915, were not, however, paid, and the foreign bondholders report that the Government should probably be considered as "defaulting" (Forty-first Annual Report of the Council of the Corporation of Foreign Bondholders for the year 1914, London, 1915, p. 20ff).

[10] Ibid., Supplement, Apr. 30, 1915.

[11] Ibid., Supplement, July 19, 1915.

chief customer, were not disturbed. The cocoa crop held over from a year before was sold in the Puerto Plata district at an advance of from 25 to 50 per cent because of the war. Sugar and coffee exports rose in value. Imports in the country, as a whole, decreased, and the Government income as a consequence fell,[1] but exports increased. In Cuba the war caused depression in the tobacco industry, but brought a good market for the island's great staple, sugar, which constitutes about 70 per cent of its export trade. In 1915 high prices for sugar made the general business outlook favorable.

In September, 1915, it was asserted that the island "should have the greatest crop in history if weather is normal."[2] Lands idle for 20 years have been planted. Thousands of acres usually devoted to other crops have been shifted to cane, and "immense tracts of virgin lands have gone under the plow for cane planting."

In Central America the outbreak of the war hampered business for the first few months, and, with some exceptions, cut down public revenue. In Costa Rica, for example, imports and revenue declined 50 per cent, but the Government was able to keep up its payments on its foreign debt, and a domestic loan amounting to $500,000 was subscribed within a week. By the latter part of 1915 trade had largely come back to normal conditions.[3]

Guatemala, Panama, and Salvador[4] apparently had similar experiences. In Nicaragua a moratorium was established by a law of October 23, 1914, and certain features were still in force at the close of 1915. The east coast banana districts, practically all of the trade of which goes to the United States, did a better business in 1914 than the year before. The west coast exchanges showed a decline of only 12.6 per cent, due to a short coffee crop. Nicaraguan coffee, in 1914, had left the country before the outbreak of war, and by the time the 1915 crop was ready, business conditions had become practically normal.[5]

Honduras, like Ecuador, in South America, is not even in ordinary times in a happy financial situation. But, as in Ecuador, the war has had but little adverse effect—indeed, on the whole, it seems thus far to be contemporaneous with a period of prosperity. "No moratorium was declared or even considered when the war commenced, and since that time Government and business obligations have been discharged with even more promptness than usual."[6] The east coast hardly felt any bad effects. "Not a single ship was withdrawn on account of the war."[7]

Taken all in all, the performance of the Latin-American States under the financial strain put upon them by the war has been reason for mutual congratulation. The chief commercial group, Brazil, Uruguay, Argentina, and Chile, are evidently determined that they will sustain their foreign credit even at the cost of curtailment of public improvements, and in the case of Chile, of heavy relief expenses. The inland Republics, Bolivia and Paraguay, are not closely touched by the consequences of the war. Of the four remaining independent States of the southern continent none have strong governments, but all appear to be making headway, due both to the praiseworthy efforts of their

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[1] Commerce Reports, Supplement, June 26, 1915, and July 15, 1915.

[2] Ibid., Supplement, May 10, 1915, and Commerce Reports, Sept. 29, 1915 (dated Sept. 10).

[3] Supplement, June 21, 1915, and Commerce Reports, Sept. 16, 1915.

[4] Ibid., Supplement, Nov. 1, 1915.

[5] Ibid., Supplement, July 22, 1915; Oct. 5, 1915; and Dec. 1, 1915.

[6] Ibid., Supplement, July 7, 1915.

[7] Ibid., Supplement, Feb. 23, 1915.

Governments to meet the situation and to the fortunate position which their chief products hold in the world's market. The sugar of Peru enjoys an unusual access to profitable outlets, and the cocoa products of Venezuela, and especially Ecuador, appear to be enjoying a demand which at least approaches that in times of peace. The coffee market in Venezuela and Colombia appears to be successfully adjusting itself to new conditions.

The Caribbean countries, Mexico and Central America, except where business is interfered with by local revolutions, seem to be in even better economic positions, due in large degree to the fact that their foreign trade is chiefly with American rather than European nations.

In this time, when European States are pouring out their capital in the most destructive war of history, it is gratifying to see the anxiety and ability of the American States to maintain their credit even at great temporary inconvenience. Had the conflict resulted in a general defaulting on the debt services it would presage bad local effects. Capital would hereafter be more cautious in making loans and development of resources would be checked. Such defaulting would have in addition an international effect peculiarly unfortunate. Creditors would urge their Governments to bring pressure to force payment, as they have done in the not distant past. Questions of the degree to which such pressure could be availed of before it would offend the fundamental principle of new-world policy would be brought before the respective departments of foreign affairs. In short, an inability or indisposition on the part of certain debtor countries to stand the financial strain incident to the war might put the other American States into a very unwelcome diplomatic position. Not only are the Latin-American nations to be congratulated, therefore, because the war has not affected them more adversely, but all American States are to be congratulated that the efforts being made promise to be sufficient to prevent the national debts from becoming the basis of serious international disagreements.

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The CHAIRMAN. The meeting will now stand adjourned until 2.30 p. m., to meet in this same hall.

Thereupon the section adjourned until 2.30 o'clock p. m.

GENERAL SESSION OF SECTION IX.

New Willard Hotel,
Tuesday afternoon, January 4, 1916.

Honorary Chairman, Juan B. Ambrosetti.
Chairman, Jacob H. Hollander.

The meeting was called to order at 2.30 o'clock by Chairman Hollander.

Papers presented:

El problema rentístico de Nicaragua, by Pedro J. Cuadra Ch.

Industrial investments as a basis of foreign trade expansion, by David Kinley.

Why Latin-American municipal and State bonds should be quoted in New York, by Roger W. Babson.

EL PROBLEMA RENTÍSTICO DE NICARAGUA.

Por PEDRO J. CUADRA, CH.,
Ex-Diputado de Nicaragua.

Escasa ha sido la experiencia de Nicaragua en su vida económica de nación independiente; pero no tan destituida de enseñanzas e interés, que no se preste a un breve comentario para un general esclarecimiento del problema del impuesto. Si la existencia de las grandes naciones, como potencias económicas de primer orden, ocupan casi todas las páginas de la historia, mostradas como ejemplos ilustrativos de teorías científicas, alguna parte al menos es justo que se les reserve de vez en cuando a los pueblos pequeños, que como entidades perfectas, pueden, aunque su vida sea infinitesimal, derramar tanta luz como los grandes; porque no en vano son ellos también microcosmos nacionales.

Esta circunstancia únicamente le puede dar a lo que pudiéramos llamar "el caso de Nicaragua", importancia científica, de la que carecería si no se eleva de la pequeñez de lo particular a la altura de una significación general, que solo excusa el tratarlo fuera del recinto patrio; aunque con la mirada dirigida a él lo elegí como tema para presentarlo ante el Segundo Congreso Científico Pan-Americano, buscando, si acaso provoca útiles discusiones, mayores luces para atinar con la mejor solución de este vital problema que tenemos pendiente, en el empeño de sentar las bases de nuestro futuro bienestar nacional.

La historia de las naciones, en todos los ramos de la humana actividad, es un tejido de errores y aciertos, que impidiendo su avance hacia la civilización o dándole impulso adecuado, han contribuido a formar su presente. Es patriotismo desear que el número de los errores disminuya en cada país y aumente el de los aciertos. Para alcanzar este ideal, negocio peculiar del hombre de Estado, es indispensable oir los dictados de la ciencia en cada caso; sólo asi se puede disminuir el número de los errores, ya que su desaparición completa es imposible. Y aun se impone más ese deber en los países pequeños, que en los grandes; porque es un hecho que así como una persona robusta y fuerte puede abusar de la salud sin quebrantarla, mientras la débil y delicada, con el menor descuido, la pierde, de igual manera los errores cometidos por un pueblo pequeño tienen peores consecuencias para su porvenir, que los de los grandes.

Si Nicaragua, por ejemplo, deseosa de progresar, emprendiese la construcción de un puerto, acreditando el Congreso diez millones para la obra, como sus recursos son limitados, si hubo error en los cálculos y en la práctica se ve que se necesitan diez millones más, el país acaba en ruina; pues el gobierno se vería obligado a parar los trabajos, y así el capital empleado se habrá gastado sin provecho. El observador superficial achacará ese fracaso al abandono, al carácter indolente del pueblo, cuando no ha sido más que el producto de un error, de que ninguna nación se puede librar en el mundo.

Consideremos igual caso en una nación grande, y tomemos, por ejemplo clásico a los Estados Unidos, este portento económico del mundo moderno. Es notorio que los cálculos efectuados para el costo del Canal de Panamá salieron en la práctica equivocados; pero como sus recursos económicos son inmensos, el error no tuvo mayores consecuencias y los trabajos se siguieron y siguen sin interrupción hasta el feliz coronamiento de la maravillosa obra.

De los distintos resultados obtenidos por iguales errores, según la vitalidad económica del país en que se cometieron, si se revela la desventajosa posición de los pueblos pequeños respecto de los grandes, se desprende también la lección objetiva de prudencia económica, de que la ciencia es muy necesaria, necesarísima, para el hombre público en nuestras pequeñas nacionalidades, más acaso que en las grandes, pues únicamente de sus aciertos depende todo el porvenir próspero del país; y si en algún punto es indispensable tener presente esta lección, es cuando se viene a resolver la cuestión vital del impuesto, que constituye, en frase de un economista, "el punto central de la hacienda pública moderna."

En la presentación de la experiencia habida en Nicaragua, sobre este particular tan importante, tendré como un postulado, para no entrar en disquisiciones inútiles, el derecho que le asiste al Estado de imponer contribuciones sobre los súbditos, para que pueda cumplir su misión de dirigir a la sociedad hacia el fin para que fue creada: esto es, al logro de la felicidad temporal en el mayor número de individuos posible. Admitida esta proposición, podemos aceptar, como una de las mejores, la definición de impuesto que trae el Profesor Bastable en su obra *Public Finance:* "A tax is a compulsory contribution of the wealth of a person or body of persons for the services of the public powers," esto es: Un impuesto es una contribución compulsoria de la riqueza de una persona o cuerpo de personas para los servicios de los poderes públicos.

En esa definición, en que se usa la palabra *compulsoria*, su autor no se olvidó de la naturaleza del hombre, que tiende por natural propensión a escatimarle al Estado su auxilio y por eso la idea de compulsión está bien incluida en la del impuesto, pues siempre va supuesta aun en el momento en que uno cumple voluntariamente con el deber de satisfacerlo. El impuesto además es una obligación moral y de aquí que sea siempre una persona la que la llena, aunque por la letra de la ley se le imponga sobre cosas. El impuesto es riqueza, aun cuando se pague en forma de servicios personales, pues se pueden convertir en ella. El fin del impuesto tiene que ser "el servicio de los poderes públicos," en lo que hallan su justificación moral, y desviarlo de ese fin lo colocaría en la categoría de una depredación pública.

De lo dicho se desprende que este asunto se puede considerar desde dos puntos de vista, el del Estado y el del individuo. Como el Estado tiene deberes imprescindibles que desempeñar, necesita recursos y de allí su derecho de exigírselos a los ciudadanos, en cantidad justa equitativa. Al individuo le corresponde el deber de otorgar su contribución proporcionalmente a su riqueza; pero tiene el derecho de exigir que los fondos públicos se empleen para el bien de la comunidad. Cada país tiene su modo peculiar de tratar estos deberes y derechos mutuos entre el Estado y sus súbditos; materia que se sale de nuestro propósito actual, con el que lo liga tan solo su influencia general, porque "el

impuesto levanta una serie de cuestiones fundamentales que envuelven complicadas consideraciones éticas y económicas. El objeto de cualquier sistema de impuestos es estrictamente una cuestión económica, que requiere, para su resolución, recurrir frecuentemente a las condiciones de la producción y la distribución. Cual debe ser el sistema adoptado en cada caso especial, debe decidirse en vista de las condiciones morales y económicas."

El Profesor Bastable, con esas palabras, nos pone en el camino real de nuestro caso, que examinaremos desde el punto de vista de la ciencia.

¿Qué sistema ha adoptado Nicaragua para satisfacer la imperiosa necesidad de darle vida eficaz al Estado, sin cuya existencia central la sociedad se descalabraría? ¿Cumplen los ciudadanos con el deber de sufragar los gastos del Estado y hace éste lo posible por encaminar los fondos públicos sólo al bien común? ¿Existe, en una palabra, un sistema adecuado de impuestos? Y si no, ¿por qué? ¿Cuáles son, además, las condiciones morales y económicas, en vista de las cuales se debe resolver este problema?

Aquí encuentro harto deficiente nuestra experiencia. Nuestra práctica rentística no puede enseñar una lección positiva; pero esa falta la recompensa, por lo valiosa e interesante para nuestro porvenir, la de carácter negativo, que de aquella se desprende.

Carece Nicaragua de un sistema adecuado de impuestos, por la sencilla razón de que su sistema monetario era de papel moneda inconvertible.

El Estado ha derivado su renta principal de los derechos de importación, que daban abasto para las necesidades de la administración pública, cuando la vida del país era modesta. Bajo esas condiciones, la riqueza nacional crecía y estimulaba un comercio próspero. Con la baja de la plata en los mercados del mundo, sufrió el país poderoso quebranto, perturbado el valor real de su moneda; y la agricultura y el comercio padecieron en consecuencia. Reflejóse en el gobierno, como en un gran espejo, el malestar económico del país, con la escasez del Erario; y en lugar de ponérsele al mal el remedio adecuado, estableciéndose el patrón de oro, se cometieron graves errores, que, agravándolo, detuvieron la marcha progresiva de la república. Entramos de lleno en las movedizas arenas del papel moneda inconvertible, cuyo empleo, aunque recomendado por la ciencia en grandes emergencias, ofrece peligros tales de abuso, que muy pocas naciones se han librado de él, como lo manifiesta la historia económica de los Estados Unidos, Inglaterra, Francia, etc.

El establecimiento de este barato sistema monetario suele vendar los ojos del gobierno, para no volver a ver, mientras persiste, la situación económica, real efectiva, del país que rige. Si éste prospera o decae, si el Estado gasta más de lo que debe, si los ciudadanos contribuyen con impuestos adecuados o no, todo eso, tan importante para una sana política, se pierde de vista; porque esas cosas se descubren con el *deficit* en el presupuesto, que se colma entonces fácilmente con emisiones continuas de billetes, como si la riqueza pública la pudiese crear la ley, y no fuese el producto solo y dilatado del trabajo y ahorro individuales. Engañado el gobierno con esa facilidad de recursos, no para mientes en el daño que se le está infiriendo al país en su agricultura y comercio, vuelta ilusoria la ganacia del trabajo y la industria; ni se detiene en los gastos y mucho menos se dedica a estudiar las condiciones económicas del país, que dan la clave para una justa resolución del problema rentístico, que ignora. Por esa triste experiencia pasó Nicaragua en los últimos veinte años de su vida política.

El mal, por dicha, está ya remediado. Hace ya dos años que el gobierno le puso la segur a su raíz, poniendo el sistema monetario de la república sobre la base de oro. Incontinente se reveló el problema oculto: *Nicaragua no tenía un sistema adecuado de impuestos.* Y si por los daños que produjeron los errores pasados es propio colegir los beneficios que reservan las rectificaciones

presentes, se puede prever un futuro próspero para el país, desde luego que el trabajo y la industria no estarán ya expuestos a las perjudiciales fluctuaciones que, de antiguo con la moneda de plata, y en lo recién pasado con el billete, desconcertaban la actividad nacional, quitándole todo estímulo de esfuerzo productivo.

El problema así planteado, o mejor dicho, así revelado, solo exige del gobierno la resolución de llevar a la práctica el mejor parecer de la ciencia; y digo esto, porque el sistema de papel moneda inconvertible no sólo perturba la vista del gobierno, como hemos visto, sino también enferma el ambiente público, desacostumbrando a los ciudadanos a contribuir con parte de su riqueza para el servicio de los poderos públicos. Puede sentarse, como verdad manifiesta, que en todo país, *después de un régimen dilatado de papel moneda, se acrecienta en los individuos su resistencia natural a pagar impuestos.* En Nicaragua prácticamente se ha visto ésto y es una de las condiciones morales que dificultan una pronta resolución de este problema.

Por lo cual es útil tener presente que se agrupan en dos categorías los diferentes sistemas de impuestos: los sistemas económicos y teóricos, y los empíricos y fiscales. Indudablemente es fácil idear sistemas de impuestos, perfectos en teoría, que reducidos a la práctica fallan. Si se pudiera lograr que cada ciudadano contribuyese proporcionalmente a su capital para los servicios de los poderes públicos, se habría establecido el ideal de los sistemas de impuestos, pues se habría implantado al mismo tiempo la perfecta libertad de comercio. Pero eso no es posible, sobre todo en países pequeños, donde la tendencia de evadir el impuesto se acentúa más, debido, en parte, al juego de las influencias personales que se imponen más que en los grandes, donde la ley, pudiera decirse, obra maquinalmente sin mayores causas perturbadoras. Y si a esto se agrega los malos hábitos adquiridos a influencias de una dilatada circulación de papel moneda, la impracticabilidad del sistema directo se aumenta; pues el pueblo, con todo y su sumisión al inicuo tributo a que en realidad se reduce el billete, desacostumbrado al desembolso personal de un impuesto, resiente hasta el más justo y módico, si se le presenta en otra forma.

De las observaciones anteriores se desprende lógicamente que, en la práctica, el mejor impuesto, por cuanto no hiere directamente a la imaginación, (resorte político que debe tomarse en cuenta) es el impuesto indirecto o secundario; pero como constituido de ese modo un sistema rentístico no resulta adecuado, se debe también completar con los directos o primarios, para que de la combinación de ambas clases se llegue a la perfección práctica. La guerra europea puso en evidencia lo precario que es la vida de un gobierno, cuando solo depende de los derechos de aduana (derechos secundarios o indirectos principales); pues sujetos al monto de las importaciones, al paralizarse el comercio internacional por causa extraña, disminuyen tanto que obligan a recursos extraordinarios, como impuestos de guerra especiales, o emisiones de billetes, o empréstitos internos. Con la combinación preconizada, cuando por alguna circunstancia deja de responder el impuesto indirecto, el gobierno se equilibraría con solo subir, como medida transitoria, la rata del directo, para mientras vuelve la normalidad económica.

En Nicaragua, donde por su pasado de errores estábamos en esos momentos críticos sin un sistema adecuado de impuestos, con la agravante de un presupuesto de gastos mayor del natural, producto todo de la ocultación del verdadero estado económico del país, la guerra europea produjo indudables beneficios inmediatos. Naturalmente los produjo, proque ya el gobierno estaba sin venda en los ojos; y ante la disminución de la renta aduanera por la guerra, vió con clarividencia recomendable que no le quedaba otra salida que la que, en el orden de la ciencia, mucho antes se debía haber abierto: (1) La rebaja del presupuesto de gastos; y (2) El establecimiento del impuesto directo sobre la

propiedad. Así se hizo; pero no sin vencerse antes grandes dificultades morales, como lo manifestó el señor Presidente don Adolfo Díaz en su Mensaje al Congreso el 15 de diciembre de 1914:

El Ejecutivo no ha dejado un momento de procurar cualquier rebaja posible del presupuesto de gastos; pero el país, debemos confesarlo, no ha ayudado en ello, y una oposición tenaz, por el contrario, encontraba siempre la reducción del presupuesto. . . . Para que su reducción al grado mínimo se verificara, necesitábamos de un estímulo poderoso y éste se presentó en la forma de una nueva desgracia.

Nicaragua entró con el agotamiento en sus fuerzas, por pasadas calamidades, a la gran crisis mundial que ha producido la guerra europea. Y al reclamo de la nueva exhaustez tuvimos de manera imprescindible que dar el prudente paso de la reducción del presupuesto. Resolvió el Gobierno no perder la coyontura y con el auxilio vuestro logró establecer dos mejoras, tan importantes, que las creo capaces de amortiguar en Nicaragua el mal recuerdo de esta guerra europea. . . . Son estas mejoras la reducción del presupuesto y el establecimiento, aunque sea con carácter transitorio, del impuesto directo sobre el capital. . . .

Graves reflexiones se apoderan de nuestro ánimo, al considerar lo inanes que resultarían los dictados de la ciencia, si no los recibe un corazón prudente. Parecerá mentira, pero ello es muy humano, que para que se estableciese en Nicaragua lo que la ciencia preconizaba como un seguro específico contra la enfermedad económica, haya sido necesario nada menos que el mundo europeo se desplomase al peso abrumador de las armas. Pero aquí tenemos palpable un caso en que se pone de manifiesto que lo moral es tan indispensable en el acierto económico, como el mismo conocimiento de la materia; para que no resulte cierta alguna vez la profunda observación humana de Ovidio: *Video meliora, proboque deteriora sequor*, Veo el buen camino y lo apruebo; sigo empero el malo, tan frecuente por desgracia en los asuntos de Estado.

Pero si se estableció la fecunda obra del impuesto directo sobre el capital, se cometieron a mi juicio en su ejecución dos errores. El primero fué hacer transitorio lo que debe ser permanente, error, sin embargo, inevitable, por la misma razón de que el país, olvidado de sus deberes de contribuyente por el largo dominio del papel moneda, que suplía todas las necesidades del Estado, no ve con buenos ojos ningún esfuerzo en el sentido del cumplimiento efectivo de aquellos deberes; harto se había logrado con su aceptación transitoria, paso previo para su permanente en nuevo esfuerzo legislativo. El segundo error fué de forma puramente; y consistió en haber el Legislador hecho depender el éxito del impuesto de la buena fe del individuo contribuyente, obligado por la ley a hacer declaración de su capital. Indudablemente todo buen Legislador debe siempre presuponer la honradez y buena fe del ciudadano; dudar de ellas sería contrario a una sana política; pero de eso a ponerla a prueba a cada paso *individualmente* hay mucho trecho; y lo último es lo que se debe evitar, para hacer efectiva semejante legislación, sobre todo en países pequeños, como Nicaragua. Por eso soy de opinión que, *dadas nuestra circunstancias morales y económicas, el impuesto para que sea productivo, debe recaer enteramente sobre la propiedad inmueble, dejando a salvo la persona.* Claro está que en último resultado la persona siempre es la gravada por el impuesto; pero en este caso no lo será sino de una manera indirecta, lo cual es sin disputa una inmensa ventaja.

Si el impuesto en esa forma, en combinación con los secundarios de que hablaremos en seguida, no llena las necesidades todas del Estado, que en una discusión como la actual se suponen naturales y legítimas, el sistema así establecido se podría aun perfeccionar con un impuesto módico sobre la renta declarada por cada uno. Sería este impuesto supletorio únicamente, con la ventaja de incluir en el número de los contribuyentes a aquellos capitalistas que no poseyendo inmuebles, pudieran considerarse privilegiados sin este impuesto.

La obra para el gobierno es mucho más fácil en cuanto a los impuestos secundarios, sancionados como están en la práctica por dilatado uso. La obra es solo de perfeccionamiento, para que, sin detrimento de la vida económica del país, logren su objeto de hacer contribuir al consumidor oportunamente para los servicios de los poderes públicos.

La renta principal de esta fuente indirecta la constituye la Aduana.

No entraré aquí a discutir la complicada cuestión de la tarifa, ajena a mi objeto. Nicaragua no es un país industrial y por consiguiente, la candente cuestión del proteccionismo no es vital. La aduana para nosotros no es barrera contra la industria extranjera, sino únicamente uno de tantos medios de entradas para el gobierno. Desde este punto de vista el problema no ofrece dificultades, y cualquiera puede convenir en que los derechos deben ser módicos en lo general, lo suficiente para que le produzcan una renta adecuada al Estado. Este espíritu es el que siempre ha gobernado en este ramo de la administración pública; y así *se ha establecido que los artículos de primera necesidad y toda clase de máquinas y herramientas y libros de cualquiera índole, no tengan derechos de importación.*

Los defectos de que adolece nuestro sistema aduanero son de otra especie. El Recaudador General de Aduanas, persona muy entendida en la materia, dice, a este respecto, en su informe de 1913, que:

La tarifa de Nicaragua, basada totalmente en el peso bruto de las mercaderías y compuesta de clasificaciones hechos hace muchos años cuando las condiciones comerciales y económicas eran radicalmente distintas, es inadecuada para las necesidades y condiciones comerciales de la República en el presente. El sistema de peso bruto es muy arcaico y falto de economía. A veces los importadores sufren injusticias ocasionadas por dicho sistema y por malas clasificaciones; y por otra parte el Gobierno deja de percibir mayores derechos sobre ciertos artículos que bien pueden pagarlos sin perjuicio alguno para el comercio, o pierde rentas debido a que ciertos artículos están gravados con derechos excesivos que hacen imposible su importación. A solicitud del Señor Ministro de Hacienda el Recaudador General de Aduanas ha empezado el trabajo preliminar para la preparación de una tarifa completamente nueva. Es el propósito formular una tarifa con clasificaciones modernas y los aforos más apropiados a las condiciones de la República, los cuales, al mismo tiempo que produzcan a la nación tanta renta como sea posible, sean sentidos lo menos posible por el comercio de Nicaragua. Las leyes de Aduanas son en su mayor parte muy buenas.

Como se ve, la situación aduanera no puede estar mejor; porque si es verdad que existen defectos, el conocerlos y estudiar por medio de peritos el modo de remediarlos, les quita el carácter de gravedad que pudieran tener. Las naciones no se pierden tanto por sus errores, cuanto por ignorar que los cometen o por su resistencia a reconocerlos. De aquí que cuando un mal es patente y el gobierno bien intencionado y dispuesto a corregirlo, su cura, por dificultosa que sea siempre se logra; porque se ponen los medios para alcanzarla.

Otro gran defecto de que adolece en la actualidad nuestro sistema aduanero, consiste en que algunos artículos de exportación pagan derechos. Es trivial la doctrina de que en este caso el productor del artículo exportado, cuyo precio depende de la oferta y la demanda que haya en los mercados extranjeros, es el castigado con semejantes impuestos; pues no está en su mano subir en un tanto igual el precio de su producto, como sucede en los importados, cuyos derechos el comerciante adelanta tan solo y los paga el consumidor. Ya en Nicaragua, sin embargo, el gobierno se ha percatado de esta injusticia; y pronto tomará los pasos necesarios para librar al cafetalero de esa contribución particular que lo perjudica; y es tanto más prudente esta medida, cuanto que el café constituye nuestro principal producto de exportación, y necesita más bien alientos como parte de nuestra agricultura, sobre todo si tenemos presente lo que dice Bastable, que "la economía pública depende en último resultado

de la economía nacional; todo lo que reduce el poder de los individuos (y un impuesto injusto lo merma sin duda) daña al Estado."

Poco hay que hablar sobre los otros impuestos secundarios, tales como el de aguardiente y de tabaco, el de papel sellado y timbres, y otros, que dependen en sus fluctuaciones de la situación general y demás accidentes. Unas pocas palabras, sin embargo, son oportunas respecto a la primera de las rentas mentadas. Ligada al vicio por su procedencia, el aumento desproporcional de esa renta podría con razón tomarse como indicio de decadencia nacional, si el aumento de población no lo explicase. Por eso un gobierno prudente más bien debe tender a la disminución de la causa de la renta que a su ensanche. Como no es posible la prohibición general, siendo la tendencia más práctica la prohibición personal, se impone la necesidad de crecidos impuestos sobre los licores. Este espíritu ha dominado en la legislación hecha bajo el gobierno actual, como lo observa el Ministro de Hacienda en la Memoria del Ramo que presentó al Congreso en diciembre de 1914:

Cabe hacer notar aquí, Soberano Congreso, que el Gobierno, sin dejar de mirar por el incremento de las rentas nacionales, tiene también la alta función de velar por la moralidad pública y por el desarrollo del vigor de los nicaragüenses que sumado forma también vigor nacional. Penetrado el Gobierno de su doble misión, y por razones económicas, ha desoído las insinuaciones o propuestas para el arriendo de esta renta; pues no quiere exclusivamente su aumento, razón por la cual dictó la moralizadora ley que ordena el cierre de los estancos los domingos. . . .

Este es el único espíritu en que un gobierno de principios sanos, así económicos como morales, puede tratar con acierto esta renta.

Tiene importantes conexiones con el estudio del impuesto, por muchas causas, la posición que el Estado debe mantener con respecto a ciertas empresas públicas, como ferrocarriles, telégrafos y teléfonos. Largo ha sido el debate sobre este asunto, y aun hoy los campos siguen divididos. La opinión más sensata, sin embargo, parece estar en favor de los que se oponen al manejo del Estado. No entraré yo aquí a discutir sus razones; y si la traigo a colación es solo para manifestar la política seguida por el gobierno de Nicaragua en este particular. Hasta hace poco los ferrocarriles de la república pertenecían al Estado, en cuyas manos estaba su manejo. Comprendió el Gobierno que la mejor política era no meterse a empresario, cuyos deberes se complican en un país pequeño, y formó una compañía anónima, de cuyas acciones es dueño en un 49%, habiendo vendido el resto a capitalistas extranjeros. Ahora, por consiguiente, el ferrocarril no se roza con nuestro sistema de impuestos, como empresa independiente y autónoma que es; pues el contribuyente, pagando su impuesto, no facilita ya, de manera indirecta como antes, pasajes y fletes baratos, permitidos por el presupuesto de gastos generales, que llenaba los *deficits* de la Empresa.

Hoy pasa eso en el ramo de telégrafos y teléfonos, cuyo manejo tiene bajo su dirección el propio gobierno. Alegar en favor de esa situación la baratura del servicio, es engañarse lastimosamente; porque generalmente el gobierno pierde en esos negocios, y las pérdidas sufridas gravitan siempre sobre el público contribuyente, en forma de impuestos. Por donde se saca en claro que sería un paso muy prudente, lleno de verdaderos beneficios para el país, seguir en el ramo de teléfonos y telégrafos, la sana política seguida con los ferrocarriles, por medio de la organización de una compañía de la que fuese socio, sin ingerencia en su manejo, en determinada cantidad de acciones.

El país lograría así contar con empresas independientes que contribuirían a acreditar su buen nombre de nación. Tal como están en la actualidad, integradas al Estado, ni pueden prosperar como debieran, ni representan ningún signo de nuestra prosperidad. Estas son mis opiniones personales, y me parece que esta es la primera palabra pública que va a sonar en Nicaragua en favor

de la organización privada de este ramo de servicios públicos. A esta consideración me trajo solamente el hilo del discurso.

Venimos ya al punto más delicado de estas cuestiones: el monto de los impuestos. ¿Hasta qué extremo puede un gobierno prudente recargar la mano sobre el país, sin dañar su prosperidad? Lo práctico de este problema hace difícil su satisfactoria solución. Generalmente por los frutos se conoce el árbol, y así se podría por lo menos decir, aplicándolo a este caso, que si un país con impuestos notoriamente elevados empieza a decaer, hay la fuerte presunción de que está la mano recargada. Pero puede suceder también que no haya progreso por la causa opuesta, es decir por la falta de impuestos suficientes; porque "es en verdad un error, dice Devas, pensar que cuanto menos gastos haya, tanto mejor; y hablar con Ricardo de 'la máxima de oro de M. Say de que el mejor de todos los planes de hacienda pública es gastar poco, y el mejor de los impuestos, el menor en cantidad'; pero el péndulo de la opinión pública se ha ido al otro extremo; y debemos tener siempre presente las prudentes palabras del Profesor Bastable: 'La importancia mayor y creciente del gasto oficial no nos hace, sin embargo, presumir que el movimiento es ventajoso. El sentir corriente en lo moderno está en favor de la acción del Estado, tanto como hace 50 años estaba en contra de ella; pero ninguna de esas tendencias puede ser su propia justificación: ambas tienen que ser juzgadas en el terreno de la razón y la experiencia.' "

Examinada con ese criterio la experiencia de Nicaragua, hallamos que el país ha progresado muy poco en todo el período de su vida de nación independiente, y en ninguno ha tenido un sistema adecuado de impuestos; porque cuando nuestros gobiernos eran patriarcales, la tendencia general era disminuir más bien los impuestos, conforme a la máxima de M. Say; y cuando dejaron de serlo, siguiendo la corriente de las nuevas ideas, el abuso del papel moneda impidió el establecimiento de un sistema rentístico propio. Puede decirse, por consiguiente, que Nicaragua tiene planteado por vez primera, bajo todos sus aspectos, este difícil problema; y si, como es de presumirse, su desconocimiento perturbó su progreso, cuando se le dé acertada solución, se puede asegurar que el país entrará en las vías de su prosperidad; pues un régimen monetario sólido y estable y un sistema adecuado de impuestos constituyen los rieles que llevan a la estación del bienestar económico al carro de una nación, cuando le sirven de motores el trabajo y el ahorro individual y colectivo.

Numéricamente es difícil o casi imposible calcular lo que un país puede pagar para los servicios de los poderes públicos, sin detrimento de su prosperidad. Debe existir un límite pasado el cual el impuesto se vuelve excesivo. Sería conocimiento de inestimable valor para un estadista poder leer la señal de un "de aquí no debes pasar," para no causarle irreparable daño a su país. Cada país tiene su particular *capacidad imponible*, como llaman algunos economistas a ese límite, de carácter elástico. Por eso no se pueden dar reglas fijas ni para un solo país; y así, por ejemplo, en un país poco populoso, como Nicaragua, pero de vastas riquezas sin explotar, el problema del impuesto presenta un nuevo aspecto, si al mismo tiempo que el gobierno le recarga la mano al país, con aparentes excesivos impuestos (over-taxation) se ensanchan en mayor tanto las oportunidades de trabajo, abriendo, por ejemplo, nuevas comunicaciones que faciliten la salida de los productos; porque entonces propiamente no se habrá traspasado el límite, sino solo retirado más allá. Lo que no hay que perder nunca de vista es que un sistema de impuesto que disminuya la renta de los súbditos sin su correspondiente recompensa en mejora nacional, se daña a sí mismo, segando la fuente de su procedencia.

Tampoco nos descubrirá nada un cómputo por cabeza. Devas observa que "contar el impuesto *per capita* no nos dirá si un país está recargado, ni nos posibilita pesar el monto de la carga. Así en 1890, el promedio del impuesto

para Rusia, Prusia, Italia, Inglaterra y Francia se computó en chelines respectivamente en 14, 26, 31, 42 y 51. Pero si la capacidad imponible (*taxable*) se hubiera considerado, el orden para esos cinco paises, contando del impuesto más suave al más pesado, hubiera sido probablemente Inglaterra, Prusia, Francia, Rusia, Italia. Además, considerando el impuesto *per capita*, llegaríamos a la conclusión ridícula de que por el año de 1886 la carga del impuesto era 19 veces más pesada en las colonias australianas que en la India." Y es natural, porque al lado de lo que cada uno contribuye para el Estado está lo más importante que se calla, *su capacidad productora.* Es obvio que si el promedio de los ciudadanos produce en un país cien dólares, y en otro solo veinte, si ambos pagasen igual impuesto, semejante igualdad abrumaría al segundo bajo el peso de su exceso. El interés de un gobierno, mayormente en países poco populosos como el nuestro, está en aumentar la productibilidad individual, problema que se roza intimamente con el del establecimiento de un impuesto adecuado.

Para llegar entonces a determinar si Nicaragua está o no suficientemente gravada por el impuesto, tenemos que tomar, como si dijéramos, un camino indirecto, entrando a examinar la situación rentística del gobierno. *¿Tiene éste lo suficiente para cumplir eficazmente su misión social de garantizar la paz pública mantener el crédito nacional y empujar al país en los vias del progreso?* No hay que perder de vista, al contestar esa reveladora pregunta, que si es verdad que las naciones en sus gobiernos deben seguir por lo general la norma prudente del individuo, de no gastar más de lo que permiten las entradas, también lo es que la semejanza no puede estirarse demasiado hasta que desaparezca la característica del Estado; porque este no puede, ni es justo que muera de hambre, por decirlo así, extremo lastimoso a que puede llegar y ha llegado más de una vez el individuo. Lo único que se le puede pedir al Estado es que *en los gastos públicos no haya derroches ni desperdicios*, y asegurada esa base de operaciones, *el Estado puede pedir, y el país está en el deber de otorgar lo que en realidad necesite para no perecer.*

Concretándonos al caso de Nicaragua, que tenemos en estudio, como un reflejo de teorías generales aplicadas en un país pequeño, registraremos brevemente los datos que nos revela la última Memoria de Hacienda de 1914, que tengo a la mano:

En 1913 el presupuesto de gastos era de $3,826,376.87, presupuesto a todas luces excesivo y perjudicial. En 1914 se le bajó algo, y fue en sus comienzos de $3,500,402.55. En agosto de ese año estalló la guerra europea, y entonces fué que el gobierno dió el gran paso de su reducción. Quedó reducido a $1,980,728.20. En este presupuesto solo se incluye el servicio de la deuda pública a un sindicato inglés, por la suma de $5,500,000, al 5% de interés anual y 1% de amortización; y el de los Bonos de Rentas Interiores por la cantidad de $499,740. No abraza el de otras deudas, porque no están aun al corriente, y es uno de los problemas económicos de la república. Falta, pues, que arreglar el modo del pago de $1,120,000, que se deben en New York, y a otros varios la suma de $6,676,662.79.

La renta total de la república es como sigue:

Entradas aduaneras en 1914 (6 meses bajo la guerra europea,)	$1, 225, 998. 78
Renta de licores	745, 170. 58
Tabaco	318, 516. 73
Papel sellado y timbres	36, 522. 57
Otras, aproximadamente	50,000. 00
Sumo o total S. E u O	2, 376, 208. 66
Si deducimos el monto del Presupuesto por	1, 980, 728. 20
Queda un sobrante por la cantidad de	395, 480. 46

Como se ve, con ese sobrante no hay para el pago de los intereses y la amortización paulatina de la deuda pública que aun no está servida, pues, calculándolo al 6% todo, se necesitan al menos $600,000, para ponerla al corriente, suma superior al sobrante descubierto arriba.

De esta exposición de hechos se deduce matemáticamente que el Estado necesita, para su adecuada subsistencia, mayores impuestos; y por eso, el gobierno tendrá que dejar establecido para siempre el directo sobre la propiedad, tal como lo dejamos defendido arriba para que sea de veras productivo.

Manteniendo ese impuesto no se daña la prosperidad de Nicaragua, antes se la beneficia. En estos últimos años, a pesar de la crisis producida por la guerra europea, el país manifiestamente ha prosperado; y acaba de dar una muestra de su vitalidad en el hecho de que el cambio monetario, que llegó al 120 % a raíz de la paralización de los negocios por la guerra, ha vuelto de nuevo a la normalidad, y el córdoba, nuestra unidad monetaria, se cotiza hoy a la par del dólar americano. Armado con estas observaciones podría afirmar, si no basado en verdad manifesta, al menos en las mayores probabilidades posibles, que si el Estado saca esa suma o algo más del país, no traspasa el límite de su capacidad imponible; pues no disminuiría las oportunidades comerciales, ni se bajaría el nivel de la vida popular, sacando el impuesto de lo necesario absoluto o convencional, sino de lo superfluo, que en la mente de Devas, constituye la sanidad económica de un impuesto.

Dije que eso beneficiaría más bien al país, y no lo dije sin razón. Un pueblo sin impuestos adecuados es como un caballo sin freno: nada menos que ingobernable. En mucha parte nuestros hábitos revoltosos, que se han vuelto proverbiales, han dependido de la falta de necesidades que domen nuestro carácter. La ventajosa posición económica que los países del Norte tienen generalmente respecto de los que habitan en los trópicos, es debido a que estos pueden vivir sabrosamente, sin grandes costos, bajo la intemperie sin molestias, regalados por la pródiga naturaleza en todas las estaciones, sin estímulo, por consiguiente, para un trabajo improbo; mientras que los habitantes del norte, si no se fatigan para ganar el pan de cada día, perecen sin remedio, de hambre o frío; y de aquí que en alas del principio de conservación, hayan sido elevados a la altura de su actual prosperidad, después de haber recorrido los áridos campos del trabajo y del ahorro. Colocada Nicaragua en la privilegiada zona del trópico, la indolencia y la molicie, naturales defectos de su pueblo, pudiera contarse entre las barreras que han detenido su progreso; pero a esa causa no se le debe atribuir el carácter de ineludible que no tiene. Un gobierno prudente y sabio pudiera hacer mucho para burlar esos fatales efectos; y si está animado de sanos propósitos, como debe estarlo para cumplir bien su misión de director supremo de la sociedad, encontrará en el impuesto, adecuadamente instituido, el acicate despertador de las dormidas energías del pueblo para que se levante de su postración al cumplimiento consciente de los deberes que impone la civilización, ya que la naturaleza lo incita al sueño.

No es, pues, cuestión de raza, como proponen algunos, ni siquiera cuestión de clima, como se imaginan otros, el problema de nuestro progreso. El hombre es cosmopolita, y la misma naturaleza humana agita el corazón nicaragüense y el del europeo más culto. De antiguo los pueblos más civilizados fueron azotados por auras calurosas. Si logramos ponernos en el camino recto, no faltando, como pueblo, a las leyes que la Providencia prescribe como condición de prosperidad y bienestar, (entre las que están la acertada solución del problema del impuesto), habremos salido de nuestro letargo para conquistar aunque sea un modesto puesto bajo el Sol de la Civilización, que debe alumbrar a todos, por diferentes que sean sus condiciones habitables. "Es muy difícil, observa Devas, balancear las ventajas entre países diferentes. Pero eso no importa,

porque el punto de interés para la ciencia económica no es tanto lo que forman las características físicas de cada país, sino saber si la vida del pueblo, dadas esas características, guarda con ellas armonía; si por ejemplo, en el clima húmedo y frío de las Islas Británicas las casas son calientes y secas; si en la India la sal, que es allí tan necesaria para el hombre y la bestia, es barata y abundante; si las instituciones sociales de Palestina favorecen la abundancia de pozos y agua; si en Siberia, donde apenas se puede practicar la agricultura cuatro meses, hay provisión de empleos lucrativos durante los ocho meses restantes. Y podemos concluir que casi toda región puede ser asiento de una nación feliz y próspera y está llamada a serlo: llamada a ser amada patria que debemos adornar y ennoblecer, encaminando a su bien, cualesquiera que sean, las características de la tierra, adaptándoles, en cuanto sea necesario, nuestra vida e instituciones y haciéndolas fuente de inspiración para la literatura y el arte."

Y es tanto más verdad esto, cuanto que ya se ha demostrado que el mismo europeo puede vivir en los trópicos, como en cualquier otra parte del mundo, si se observan las reglas de la higiene. El saneamiento efectuado por la mano enérgica de los Estados Unidos, en la zona del Canal de Panamá, sepultura en otro tiempo de millares de europeos y ahora vivienda sana y agradable, prueba que los principios optimistas del autor citado son tan verdaderos como alentadores para los que tienen su " amada patria," en regiones castigadas por los ardores de un sol abrasador, vistas aun con horror por el extranjero, por las enfermedades inherentes a su clima, males que se deben evitar, y el gobierno puede evitar, si apoyándose sobre la base de un sistema adecuado de impuestos, dueño de ese motor de eficiencia, emprende las obras que el caso pide y la ciencia aconseja, para que de veras se abran de par en par sus puertas al extranjero, y se llene la república de habitantes que, enriqueciéndola, contribuyan a su prosperidad y bienestar.

INVESTMENTS AS A BASIS OF FOREIGN TRADE EXPANSION.

By DAVID KINLEY,

Dean of the Graduate School, University of Illinois.

During the past 30 years there have been occasional discussions of the expansion of the trade of the United States of North America with the countries of South and Central America. These discussions, however, have been in the main academic or sentimental. University men have pointed out the possible gain to both parties, political sentimentalists have tried to develop our international solidarity around the mere name Pan Americanism, while the hardheaded business men of both countries, after listening quietly to both parties, have gone about their business well assured that the time was not ripe for any such development in a large way that would be of interest to both sides. Our economic conditions hitherto have been so much like those of the greater South American countries that we as well as they have found it to our advantage to have our business connections in the main directly with the countries of the Old World. We have not been in a position to be of great use to one another.

Conditions have changed somewhat within the past decade, and the demand for larger trade intercourse has been put on a somewhat sounder basis. On the outbreak of the present European war the call for closer business relations, both in the south and north, became louder. It appeared that the great markets of Europe might be closed to all of us, and some of them are so. The ships on which they and we depended to carry our goods were largely turned aside for the purposes of the war. The financial relations, banking

and credit, existing between our South American neighbors and the peoples of the countries which broke into war were largely interrupted, and to a considerable extent broken off for a time altogether. There resulted a great derangement of business in all the countries of the Western Hemisphere. Imports of goods already produced could not be shipped; exports could not be received. Immediately there sprang up in both the northern and southern parts of the hemisphere the call for a transfer of the former trade of both with Europe to each other. In this country most of the writers and speakers on the subject seemed to think that all that was necessary was to "go in and get the trade" which Europe was foregoing. They seemed to be of the opinion that if there had been $100,000,000 worth of trade in the form of goods exported and imported between the countries of South America and Europe, all that was necessary was for us to offer South American business men goods similar to those which they had been accustomed to buy from Europe.

Little thought was given to the fact that we did not have, and could not suddenly produce, the goods which were wanted in South America; that we could not overnight increase our manufactories to turn out these goods; that even if we could have done so, the means of transporting them in sufficient quantity were not at hand; and that it would be necessary for us to take in return the goods of our South American purchasers, for sale in our market. Many of the agitators failed to appreciate the fact that to sell we must buy; that to export we must import. They forgot that no adequate credit machinery existed for the sudden expansion of business on the large scale necessary. They forgot that we had no established business connections adequate to handle the proposed increased bulk of trade. Finally, most of them had no appreciation of the fact that much of the produce of South America already belonged to European investors as profit and interest, and that that part of the trade we could not get, even if we had been ready to export all the goods called for in the South American markets.

In order that trade may exist in considerable bulk between countries, it is not enough that each of them possess natural resources. Those natural resources must be developed, and this development requires capital. Capital is not on hand in an undeveloped country, and therefore must be obtained abroad. From the beginning of our history as a nation we ourselves have needed foreign capital for our development. In the early days of the Republic Alexander Hamilton, writing of the aid of foreign capital, remarked: "Its instrumentality has been long experienced in our external commerce; and it has begun to be felt in various other modes. Not only our funds, but our agriculture, and other internal improvements, have been animated by it. It has already, in a few instances, extended even to our manufactures."

Notwithstanding the tremendous increase of our exports within the past 18 months, it is too optimistic to suppose that we have suddenly been transformed from the condition of a debtor to that of a creditor country. We still need capital, and without doubt foreign capital will continue to flow to this country even though at the same time we export some of our own. Under our circumstances the returns to our home investments have been too great to justify us hitherto in making foreign investments. Even in cases where the return might have been greater than that obtained at home, ignorance of foreign conditions, the greater risk, real or supposed, and the general timidity of capital, have interfered. There have been some notable exceptions of firms, like Grace & Co., which for many years have been engaged in South American trade.

Our neighbors in the countries of South and Central America have been going through a similar experience, although somewhat more slowly. No one

can study the economic geography of Argentina, Brazil, Chile, Peru, Bolivia, Venezuela, and the other Republics to the south of us without realizing that great as is the economic progress that they have made, vast as is the industry and trade which in the aggregate they have built up in the past 50 years, their resources are, even in a greater proportion than our own, still untouched. Indeed, it would be rash to say that the known probable economic resources of the South American Continent are greater than the undiscovered and unknown. There is unexplored territory; there are unexplored resources on known territory; there are unexplored and undeveloped resources with possibilities of wealth far beyond anything that has yet been produced.

Now European peoples saw these conditions early as they existed, both in the northern and in the southern hemisphere. English business men were the first who had capital to spare from home use, or at any rate who were of the opinion that they could get a larger return by investing their capital in the Western Hemisphere and elsewhere than at home. Therefore, surplus English capital was the first to turn in this direction. By surplus capital I mean, of course, capital over and above that which if invested at home can earn the usual profit there.

A country whose resources are not developed certainly can not have goods to export. No matter how great its resources, how rich its economic possibilities, unless things are produced they can not be sold. Even if its economic activities are confined to agriculture, the agriculture must be on a great scale in order to have a surplus of importance for export. But agriculture in an undeveloped country can not be conducted on a large scale without machinery; without some adequate means of transportation to the seashore; without harbors; without ships to transport the grain abroad; and without banking and credit resources wherewith to pay for labor and supplies. Capital for all these purposes must come from abroad, since it does not exist at home.

When capital is borrowed abroad the immediate result is likely to be the direct exportation of the goods needed to establish and operate the business for which the capital is borrowed. For example, when an English company built a railway in Argentina, even though the company were incorporated in Argentina rather than in London, the mode of operation was this: The capital being subscribed by English capitalists was put to the credit of the company in London. On beginning construction, the railroad company found it needed locomotives, cars, rails, spikes, tools, and all the things necessary to build a railroad. Orders were placed for these with English firms, and payment made by drafts on the credit in London. This process created a direct demand for English goods, and therefore increased exports of manufactured goods from England to Argentina. It is conceivable that these materials for building the railroad might have been bought from some other than English business firms, and paid for with drafts on the London loan. If, for example, Belgian, French, and German producers of these materials could have supplied them more cheaply the new railroad company might have bought them there. Even then the result would have been an increase of exports from England, or the lending country, because the London credit thus obtained by the third country would be met in whole or part by English exports. In either case, therefore, the exports of the people who lend are increased.

In due time our new railroad will be in operation. It will need repairs and call for extensions. What more natural than that the materials for those repairs and extensions will be bought from the people who manufactured the original equipment? The railroad must be manned. What more natural than that it be manned in part by people from the country from which the capital has come? Therefore, a considerable part of the wages and salaries will go to

the people of that country. In due time, moreover, our railroad earns dividends. These dividends are payable to the people who advanced the capital. They go to them in the form of exports of the country in which the railroad has been built. Therefore the investment of this foreign capital in due time stimulates Argentina's exports as well as her imports. If the foreign loan is made to develop agriculture the effect on trade is more immediate because a product capable of exportation comes immediately from the investment and operation of the capital. Naturally the form which the investment takes, the industries which it promotes, are those which the economic resources of the country require, and in the order in which returns are likely to be most rapid. In short, when capital is loaned abroad it causes an export of goods of the kind needed for the enterprises contemplated, especially if managed by representatives of the foreigners who lend the money. This has been the usual case in South America. The capital borrowed has been spent as a rule by foreign companies organized for the purpose and they, of course, have gotten their goods at home.

It is quite obvious that that part of the exports of a borrowing country which goes to pay interest and profits on investments made in it by people of other countries constitute a part of its trade which other people can not secure unless they are ready to take over the investments by advancing capital of their own. Equally obvious is it that some part of the imports of the borrowing country consists of goods which represent capital in the process of investment loaned by the people of other countries. This part of the export trade to the borrowing country no third party can secure unless it is itself ready to advance the capital for the operations contemplated.

But in course of time the people of a borrowing country find that two other things happen. In time the borrowed capital produces more goods than are necessary to meet operating expenses and pay interest and profits on the investment. Therefore they have a surplus for export. This net surplus, if I may call it so, may go anywhere in the world. This part of the export trade may be "captured," as the saying is, by any third country, if it and the borrowing country find it advantageous. It is to this part of the growing trade of our South American friends that we must attribute largely the expansion of our own trade with them in the past decade or so. To be sure we have made some investments there, and part of the goods we receive represent profits and interest, but in the main our trade has been export of our goods for goods produced by them, with borrowed capital, over and above what was necessary for their own consumption and the return of dividends on their loans.

A second thing that will happen in time is that out of the savings of their part of the product of the borrowed capital the people of the borrowing country will accumulate sufficient to repay the loan and furnish their own capital. Their exports to meet payments of dividends and interest will then cease.

To sum the matter up briefly, the investment of capital in a foreign country brings gain, first, to the lenders by stimulating the exports necessary for the project, its future extension, and its upkeep, and by building up among the people of the borrowing country a sentiment in favor of purchasing other goods from the same source. Such investment benefits, second, the borrowing country by developing its resources, giving employment to labor, stimulating production, and giving it in time surplus wealth out of which to repay the capital, and so ultimately to increase its foreign trade without respect to payment of loans. Finally, the process indirectly benefits the rest of the world.

Some light is thrown on these conclusions by the study of English and French and German investments in South America.

If we had accurate figures of the foreign investments made from year to year analysis would enable us to trace a relation between these investments and the

exports and imports of the lending and borrowing countries. Such an analysis is impossible in a short paper like the present. Moreover, complete statistics are quite impossible to get. Nevertheless, we can show a variation of the kind mentioned, which, although not close, yet goes to support the thesis laid down that a foreign loan means increased exports from the creditor country to the debtor country; and later increased exports from the latter to the former.

Various estimates of English foreign investments have been made. For our present purpose it does not make much difference which figures we take. Those of Mr. George Paish will serve. They are given in the Journal of the Royal Statistical Society for 1911 and the Statist of January 2, 1915. After making allowance for repayments, duplication, and other possible causes of error, he gives the aggregate of British investments in foreign countries at the end of 1910 as about £1,638,000,000, of which approximately 42 per cent was in the United States. In addition he estimates that, at that time, £1,554,000,000 of British capital were invested in India and the British colonies, and thinks that the grand total of British foreign investments was then approximately £3,200,000,000. In the four years succeeding £83,000,000 more of foreign investments were added, giving a total of £1,721,000,000 at the end of 1914; and £96,000,000 were loaned to British dependencies, making the total for that purpose £1,650,000,000, and a grand total of £3,370,000,000 at the end of 1914. In addition to this there is undoubtedly a considerable amount of investment made privately, of which there is no record. Making allowance for returns to British services and for all other items, Mr. Paish came to the conclusion that of the total trade balance of Great Britain, in 1910, approximately £160,000,000 represented goods received in return for investments of capital abroad. By the end of 1914 this sum was probably about £168,000,000. In other words, the imports of the people of Great Britain included, in 1914, a large part of this income of £168,000,000. Their exports had been swollen during the years of investment by the outflow of capital goods.

The increase of foreign investment and the increase of trade can be traced in a general way. In 1890 the British people made heavy foreign investments and their export trade immediately increased. During the next three years they invested comparatively little abroad and exports declined. In 1904 lending was again resumed, and export trade again expanded from about £290,000,000 in that year to approximately £426,000,000 in 1907. The British people were selling their products "and taking payment in securities." In other words, the export of British capital increased the demand for British goods.

If we consider the case of British loans to certain South American countries we find that in the years 1908 to 1914 the issues of capital in London were—to Argentina, in millions of pounds sterling, 15.9, 24, 16.6, 15.5, 15.6, 18.6, 15.3; to Brazil, in the same years, 10.9, 7.5, 11, 19.3, 13.3, 20.8, 7.2; to Chile, 1.4, 4.2, 4.7, 8.3, 3.9, 2.6, 2.5.

If now we examine the figures[1] of exports from Great Britain to these countries in these years, we find that they were as follows, in millions of pounds sterling, reckoning the pound roughly at $5:

	1908	1909	1910	1911	1912	1913	1914
For Argentina	18.0	19.1	21.1	20.8	22.9	25.2	......
For Brazil	8.1	8.5	16.4	14.9	15.5	......	......
For Chile	3.9	4.6	5.5	8.1	7.7	......	......

[1] Figures are partly from the Statesman's Year Book (1911) and partly from the South American Handbook published by the National Foreign Trade Council, New York, 1915, where figures from former were not available.

There is apparent a variation in the amount of exports in the same general direction as the changes in the amount of investments, although the movements do not occur simultaneously. British imports from these countries show an increase as the investments become productive. Some of them, of course, become so more slowly than others, and it is impossible to trace more than a very general relationship between these imports and investment returns.

In 1913 the amount of British investments in South and Central American countries was approximately £750,000,000. Others give somewhat larger figures, but these are probably accurate enough.

The total volume of exports of Great Britain from the countries in question in 1913 was approximately £64,000,000. If we reckon the return on the total investment at only 5 per cent, something more than £35,000,000 of the products of South and Central American countries in that year represented dividends and interest on the investments of British people in those countries. Not all of this necessarily went direct to England, but in some way it reached the creditors. The important lesson of these figures is that this is a part of the trade of those countries that is impossible for us to get unless we can replace British capital with our own.

The same general relationship exists between the trade of Germany and France with the American countries and the exports of capital from Germany and France to those countries. The German statistics, like the English, vary according to the authority used, and there are considerable differences in the estimates; but it is not necessary, for my present purpose, to take them up even in as slight detail as I have presented the British figures.

As long ago as 1904 the amount of German foreign investments was estimated at about 16,000,000,000 marks, or approximately £800,000,000. The proportion of foreign German investments to total German investments of capital, both at home and abroad, was large between 1901 and 1907, varying in the period from 13 to 31 per cent. The following three years showed a considerable decrease, followed in 1909 and 1910 by an increase to about 15 per cent of the whole. There seems to be another falling off in the two years succeeding 1910. According to one recent estimate, the investments of Germans in the Americas, outside of the United States, amounts to something over £40,000,000, of which approximately two-thirds is in Brazil alone, in the southern Province of which several great German colonization societies exist. As German investments in the Americas have grown, her commerce with the countries to which she has loaned has grown, and there is the same rough correspondence between investments and trade balances.

A similar story is told by the foreign investments of the French. Here we have the same difficulty in getting statements that agree, and here also it is obvious that there are omissions and possibly some duplications. Mr. Hirst gives the total investment of French capital in Argentina up to May 31, 1908, as £21,621,000; German, £12,000,000; and little Belgium, £4,000,000. An estimate based on the official quotations of the Paris Bourse gives a total volume of French holdings of foreign securities in 1908 of 1,550,397,300 francs; in 1909, 2,394,423,700 francs; in 1910, 4,163,377,000 francs. Thiery gives the French investments in Argentina and Brazil in 1908 as 1,100,000,000 and 1,200,000,000 francs, respectively.

If, now, we turn to the exports from France to these various countries, we find that for 1908, 1909, and 1910 they were—to Argentina, 111,600,000 francs, 128,300,000, 162,800,000, or a total for the three years of 402,700,000. To Brazil the exports from France for the same years, respectively, in francs, was 48,100,000, 55,700,000, 68,800,000, or a total for the three years of 172,600,000.

The exports from France to Chile in 1908, 1909, and 1910 were, respectively, in francs, 20,400,000, 22,800,000, 36,400,000, or a total of 79,600,000.

We conclude, therefore, that there is a necessary correlation between foreign investments of capital and increase of trade. The inference is obvious that if the business men of the United States expect within a few years to expand their trade with the countries of South and Central America in any such way as popular opinion seems to expect—that is, to secure a preponderating share of that trade—the first necessary step is the investment of North American capital in these countries in very large amounts. I have pointed out already that our trade has been increasing with the countries to the south of us, for the reason that their industries of all kinds, built up as they are largely on foreign capital, have already, without doubt, reached the state of development where the people of these countries have a surplus over what is necessary to pay the interest and dividends on what they have borrowed abroad. Moreover, there is some reason to think that recent developments in American manufactures have diverted to us some of that part of the goods exported to pay dividends due to foreigners, from the countries to whose people these dividends are due, by means of a triangular trade whereby we are supplying certain goods more largely to these debtor countries and enabling them to pay their dividends with our increased exports to the creditor countries.

Aside from the investment of capital for industrial purposes, the expansion of our trade southward requires investments for the creation of financial machinery. By this I mean the establishment of banking houses and similar establishments for the purpose of making credit easy to our South and Central American neighbors, and for facilitating payment of our mutual obligations. Indeed, the establishment of such business connections and credit machinery on a large scale is the first thing that we must do, because it will enable us to share more largely in the trade not already earmarked as payment for foreign indebtedness. The establishment of banking institutions, moreover, will make our future industrial investments easier. We are already moving actively in this direction and it is not necessary to go further into the matter here.

After ample credit organization and business connections are established, however, great results will not be achieved without an expansion of industrial investments. Present popular opinion as to the possibility of doing this largely is, I think, too optimistic. We are by no means yet a creditor country in the sense that we have much capital to spare for such a purpose. I am aware that North American capital has found its way in considerable amount into certain parts of South and Central America, and Mexico, and that the amount is bound to increase. But we shall find it difficult to supply capital in sufficiently large amounts either to replace existing English, French, and German investments, or to compete with them in making future additions.

This subject should not be left without some consideration of other than economic influences that may be connected with investments of capital in any other country.

Investments of foreign capital in South American countries have been made hitherto either as loans to governments, as private investments by foreign companies or citizens, or as a result of "concessions" by Governments to companies. Sometimes these "concessions" have not been managed in the long run in the interest of the people of the borrowing countries. At times they have been made a basis for political intervention by the governments of the creditors. Moreover, force has been used to compel observance of contract by the borrower. Civilized countries should abandon debt collection by armed intervention. When citizens of one country invest money in another they do it sup-

posedly with their eyes open, and with the prospect of a profit that will insure them against obvious risks. On the other hand, if they make such investments on contracts with foreign governments themselves, or on contracts approved or guaranteed by these governments, such investors may properly have the support of their own governments by diplomatic intervention to protect their rights, if the borrowers fail to observe the ordinary morality of business procedure. But armed intervention is, in my opinion, at best a dubious policy, when the debts have arisen from investments made in prospect of profit under the laws of the countries in which they are made.

The representatives of foreign investors naturally exert considerable influence in the countries where they reside. It is proper and legitimate for them to do what they can in proper ways to increase good will toward their principals and enlarge their opportunities for investment. But the interests of the people of the country have the first claim to consideration in both public and private morals. It should always be borne in mind that their best interests require that in time this foreign capital should be repaid or absorbed among themselves, and the businesses of their country become their own. In international economic relations as in domestic economic relations the doctrine of mutual service is, in the last analysis, the only one which can justify the acceptance of foreign capital for the purpose of building up the industries and developing the resources of one's native land.

It is more than an open secret that some of our sister Republics to the south have feared the economic advance of the Colossus of the North, for the reason that our economic advance would be only an antecedent of efforts at political control or domination. So long as they think this, or so long as we commit any act which gives rise to this suspicion, so long will our efforts to get into closer business relations with them be retarded. We, of course, know that the feeling is ungrounded, but it is quite another matter to convince our friends of that fact.

Moreover, the extension of our trade is not the only thing necessary to the promotion of Pan Americanism in the best sense.

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WHY LATIN-AMERICAN MUNICIPAL AND STATE BONDS SHOULD BE QUOTED IN NEW YORK.

By ROGER W. BABSON,

President Babson's Statistical Organization, Wellesley Hills, Mass.

When in a New England bank I remember of a bond salesman endeavoring to sell the treasurer some Pennsylvania Railroad Co. bonds, but the old man replied: "No; I guess I will not buy any. They are not quoted in Boston, you know. Not being quoted in Boston, how do I know that any Pennsylvania Railroad really exists? I prefer to buy Boston & Maine bonds. Not only are these quoted in Boston, but a market for them exists here in New England. Why, young man, to see a bond quoted is almost as good as seeing the trains go by."

So my old Cape Ann friend paid 109 for a Boston & Maine 4 per cent bond, when he could have got the Pennsylvania 4 per cent bond at 106, although since the Boston & Maine bond has declined to 70, while the Pennsylvania bond is still selling at about par.

The ways of investors are peculiar and often hard to understand, but one thing is certain—namely, that they do like to see bonds quoted. It is very much easier to interest investors in a railroad, a city, or a country whose bonds they are accustomed to see quoted than to interest them in any others. There is nothing which adds so much to the salability of a bond issue as to have the issue regularly quoted. It is not that investors want to sell, but simply that they want to be noticed and to hold only such bonds as others notice.

It is on the same principle as people like to drive a well-advertised automobile rather than some unknown make, however good it may be.

Latin America wants to sell securities in the United States; but finds it hard to do so. Is it because the bonds of South American cities are not good? No. Is it because they do not yield enough in income? No. It is true that they may not be absolutely safe or yield the highest rate, but, considering the combinations of security and yield, they have few equals. In fact, these bonds would be in great demand by a large class of North American business men who like to buy speculative issues, if they only knew about them.

The reason that it is difficult to interest our investors now in Latin-American bonds is because our investors do not know about them. The reason our investors do not know about the Latin-American bonds is because they are not regularly quoted in New York. The finance department of each of the Latin-American countries should furnish the Pan American Union by cable each week the bid and asked prices (even if London quotations), for their leading Government, State, and municipal issues. These would eagerly be copied by the leading newspapers of the United States, and then North American investors would become familiar therewith. This would add to the value of the securities already issued and also provide a market for the issuance of further securities from time to time.

I go further and say that if these prices were regularly quoted in our daily press it would be only a short time before our people would become familiar with them and begin to buy them. With little expense and effort these Latin-American countries would be creating a market for themselves here in the United States which would be worth millions to them in years to come. Of course most of our financiers will say this is not feasible. All kinds of excuses will be offered by our bankers who have securities of their own to market and

who do not want the investors of this country to know that good South American 6 per cent municipal bonds can be bought in London at less than par, and that good 6 per cent South American mortgage bank bonds can be purchased to yield 7 to 8 per cent.

As a concrete suggestion in closing, I urge that the Pan American Bulletin give one page each month to quoting the bid and asked prices of the leading Latin-American bonds. I know it would increase interest among our investors in Latin-American affairs, and I believe it would increase the circulation of the Bulletin. It should help everyone and hurt no one, while laying the foundation for a great exodus of money to the land of the future—Latin America.

While travelling through South America this year I was astounded at the opportunities there for the purchase of Government, State, municipal, and mortgage bank bonds at what I considered bargain prices. Moreover, when I left this country securities were cheap here and I assumed that they were cheap all over the world. Therefore the impression, of course, was not then as keen as it would have been under ordinary circumstances. Securities in this country are now high, but the securities of these South American countries are not much higher, and in some cases lower than they were six months or a year ago. These conflicting conditions are not justified.

It seems to me that if the South American countries would make some organized effort to quote their Government, State, municipal, and corporation bonds in our market it would result in a healthy speculation in these securities. Such speculation would be very beneficial to Latin-America.

I have personally taken this up with a number of banking houses and each banking house has given me this answer. It has said: "Those bonds are already out; somebody has those bonds. It is of no object to us to place those bonds or to help North Americans buy those bonds. Sometime there will be opportunities for us to buy new issues in South America, and then we will introduce them into this country."

I do not believe that is the way to interest our investors in South America. I do not believe the way to interest our investors in South American securities is to bring out a fairly high-priced issue from which the bankers' profit has already been provided for, and then give what is left to our people. The way to interest North American business men in South American securities is to let them get in now, when prices are low. Then, after they have made a profit themselves, they will soon be hungry for something more. The reason why the attempts of our bankers to interest our investors in foreign securities are not successful is because we have simply introduced foreign securities into this market at a high price on a retailer's basis, and the next market movement has been downward instead of upward. The bankers have sold them at a time when the market was about to decline, instead of when they felt it was about to advance.

It seems to me that the great opportunity of our bankers is to provide a way by which our people can buy now from tired English, French, and German investors these South American Government, municipal, and mortgage bank bonds, which are selling at such bargain prices at the present time. Take, as an illustration, those cedulas in Argentina that are selling around 86 (absolutely good), or the municipal bonds of cities like Lima, Santiago, or Valparaiso. Why, I just know that if North American investors, or speculators, if you wish, were simply told about these things, and some method were provided whereby they could conveniently trade in them, they would buy them. Then they would make a profit in them, after which they would have a "taste of blood" and would henceforth be interested in South America.

Believe me, the only way to interest the individual in any place is for him to have some money invested there.

Some one asked me this morning how it should be done. Of course, the splendid way to have it done would be this: To have the financial or commercial department of each of the South American countries cable once a week a quotation to the Pan American Union or to one of the other Pan American organizations and simply permit them to give it to the press. If these quotations were regularly cabled here to some central office I promise they would be published every week in the leading financial and commercial papers of this country. If that is not feasible, my second suggestion is that the Pan American Bulletin have a financial section, so to speak, that it have one or two pages each month giving the quotations of a half dozen of the leading bonds of each country.

In the case of Argentina, the Argentine bonds and the cedulas should be quoted. In the case of Chile, I would quote the Valparaiso and Santiago municipal bonds, the Government bonds, and the cedulas. A half dozen bonds of each country could all be put on a page in the Pan American Bulletin. I believe that such a page would be copied, if properly released in a businesslike way, by all the financial and commercial papers in this country. Of course, in many cases the London quotation would need be used, but not in all cases.

Securities in the country are now high. Money is very plentiful. People are looking for chances to invest and speculate. It would be only a short time before John Jones, in Chicago, or John Smith, in New York, would be seeing a quotation, "City of Lima sixes, 83; city of Santiago, Chile, fives, 72," and they would begin to prick up their ears and would get in touch with their brokers and would say, "Here, I want to take a chance on this thing." The first thing you know they would be buying them. Then we would have a real interest in this country in South America, a real interest of moneyed investors. The foundation would then be laid for the transmission of millions and millions of dollars to South America through the new issues, which might easily follow if the investors had made money on something already.

A VOICE. May I ask how you account for the low price of these bonds you are quoting?

Mr. BABSON. I account for it largely because the market for them has been in England and Germany and France. Take the Argentine rails which have been almost wholly owned in England. While our rails have been going up in price, the Argentine rails have been going down in price just as the English rails have been going down in price. There has been a distinct decline in all securities, the market for which is limited to London, Paris, and Berlin. On the other hand, in buying a bond of the city of Santiago we not only have the advantage of the low price, owing to the foreign selling, but we also have the advantage of profit through exchange, as our dollars are worth so much more than are the Chilean dollars at the present time. Moreover, a South American bond would sell to yield 7 per cent, whereas a similar bond on a United States city would sell here to yield 5 per cent.

Mr. HOLLANDER. I should like to express my appreciation of Mr. Babson's very valuable suggestion, and observe in connection there-

with that there are two additional possibilities that the members of the section might properly consider. The first is the feasibility of those Pan American countries, whose securities are the objects of international investment, securing not only for new issues but for the outstanding issues a formal listing on the New York exchange.

Mr. Babson. That is the point—the outstanding issues.

Mr. Hollander. That would be an entirely practicable thing, especially with respect to any new issues—first, in the matter of the new Argentina loan, and also in the matter of the outstanding issues. Under ordinary circumstances a South American country of the first magnitude might consider such a step somewhat beneath its dignity, but in view of existing conditions, where we find the traditional financial world of America so gravely disturbed, it would be entirely a practicable thing. These countries, by conforming to purely routine requirements, could secure a listing for at least their prime securities. The immediate consequence of that would be that the formal financial publications would give a weekly or more frequent quotation to it.

The other consideration which, it seems to me, might be entertained with a view to accomplishing the results that Mr. Babson has indicated must necessarily relate only to future issues, because the existing issues have definitely established their adaptability. I mean that whatever became the definite policy of South American countries in issuing future obligations they should provide for the payment of interest and principle in not only London and Berlin but in New York, and should provide for payment at a fixed rate of exchange. I believe the American investor, until his international appetite has been very materially whetted, will feel some reluctance in making investments in securities as to which he can not be absolutely certain of the net interest return, owing to variations in exchange. If he knows what a security will yield him in consequence of the fixed rate established, if he knows that his coupon can be cashed without delay and without loss in New York, if he knows that when the security matures he will be in possession of a stipulated amount in his own standard coin, his interest therein, his readiness to invest therein, I think, will be materially more. Later, of course, he will become sufficiently confident to take that chance with the variation in exchange, but always heretofore, and now in consequence of the disturbances in international exchanges, I think the existence of this variation is a serious obstacle in the way of investments on the part of institutions and individuals in the United States.

Those countries that have adopted this advice—Japan, at times, and Argentina—have, I am sure, found that the larger market created compensated for the loss incident to changeable exchange. We must realize the fact, to which Mr. Babson has referred, that the American

investor is not accustomed to securities of this kind, and in order to talk to him everything, it seems to me, must be done not only to meet his requirements but even to dispel his prejudice.

A DELEGATE. Before speaking on the subject I have in mind, I wish to take up another question with Mr. Babson and Prof. Hollander with reference to South American securities in the United States. You know that in Europe they would not buy railroad securities issued in South America but sold in London. The Argentina railroad stocks that were sold in London were issued in London according to the English laws. The Argentine bonds that you buy in the banks were sold in Europe, but of late I have seen that the banks in Argentina have issued their bonds in Paris or in London, according to the English or French laws. Which could you more easily sell to American investors—bonds issued by the Government or by the cities, or by mortgage banks, or stocks of corporations which the people in this country know nothing about?

Mr. BABSON. You should not sell things you know nothing about.

The DELEGATE. Yes; that is true. But this is what makes the South American people afraid. I have seen with my own eyes how the American supposed capitalists have swindled the South American Republics. I know for sure that the Secretary of State did not know the real truth when they have swindled the South American countries. Perhaps he knew what he was told, but he was not told the truth. Of the several cases that have happened in that regard with the South and Central American countries I could tell you a good many.

Speaking about the subject of science, I have not opened a book of science since I left school, and that is a great deal more than six months ago, but I have studied science in business life. I was 27 years old when I sold South American Railway bonds in Paris. They were issued by a South American company according to the French laws. The bonds were all sold in Paris and the money paid for American rails. We sold French bonds, issued according to the English laws in London, and with that money we bought American rails, because the people who managed the company were Americans. My contention is this: What we require is an investment of men; not so much an investment of money. I have seen men working on a South American country railroad built by an American corporation. Without a single dollar they sold the bonds in London and with that money from the sale of the bonds, raised in London, they bought American cars and American equipment. Why? Because the manager of the road was an American, and he, of course, was interested in this country. Price for price, if the performance of their duty required them to buy the American rails they were justified, but if they bought American rails at a higher price they were not performing their duty.

I do not think it is fair to make North Americans believe that if they invest money in Latin America, that the people of Latin America are going to buy a dollar's worth more of American goods. The people buy where they see fit to buy, and where they can get better prices and better terms of payment. I would like to know if there is any person in this room, or anyone out side of this room, with $10,000 to invest in shoes, whether he cares if his neighbor sells him the shoes. He will want to have a good return for his money and security, and speaking of anything else is simply losing time. What can he care if another man is going to sell more shoes? The case of the man selling $10,000 worth of South American bonds is absolutely the same. The man who bought the shoes and the man who profited by the bonds are both human.

At the beginning of the war there were a lot of Japanese bonds sold in New York. In buying from Japan, who issued the bonds, where was American trade to be increased? In Germany, or in Japan? Nowhere. We may have increased our trade with Japan; but absolutely for other reasons than by buying their bonds. If you people are acquainted with other countries of the world where Americans have been investing money, you can tell me what the people think of the foreign investor who goes there. They do not love him especially. They know he goes there for nothing but his own good. He does not go there for the public good. He goes to make money for himself, not the people. The people don't like the men who make money for themselves alone; at least I do not. I don't say we hate them, but we certainly have no particular love for them. You offer French and English goods at a cheaper price and we will buy them. I see absolutely no connection between the investment of money and the increase of trade. What investment brokers want is to get rid of the bonds. What they want is to sell, because they are just like the man who is selling shoes. The last thing he wants is shoes. He wants other people to have shoes and to buy shoes from him.

I do not believe that the investment of money in any country produces the goods. If that were the case, please tell me where the United States before the war invested a dollar. But it increased its exports over two million and a half. England invested three or four billion dollars in this country. Did we buy more goods from England? Or did we use that money to improve our interests and then buy German goods? What did the English investors care about that? They were satisfied in getting the return. Instead of buying more goods from England we sold more goods to England. As I say, the investment of money in a foreign country is a good thing for the investor if he gets a good return and his money is safe, and for

the country in which it is invested because with that money it can develop itself; it can produce more and buy more. But the proceeds of that development are not indebted to the country from which it came. The country is perfectly free to do with it what it pleases. I think where this country has such a tremendous amount of money that it can invest, it is of great interest to see it invested for the promotion of the whole world's trade; but to make the people believe that with the proceeds of that money they are going to buy American goods is absolutely telling something that is not commercially true—it may be scientifically true, Mr. Chairman, but it is not commercially true.

Mr. BABSON. Mr. Chairman, I have a question I would like to ask of Prof. Hollander. It is in view of what several people have said regarding the listing of securities of South American countries in the United States. I want to ask Prof. Hollander if he thinks this short resolve would be out of place:

Resolved, That it would be mutually beneficial if the Latin-American countries have one or more of their prime securities listed in New York, and until this is done that they furnish weekly or monthly quotations to the Pan American Union for release to our press. That a copy of this resolve be sent by the secretary of this meeting to the ambassadors and ministers of the Latin-American countries for transmitting to their respective Governments.

Mr. HOLLANDER. Mr. Chairman, might I suggest that the same procedure be adopted with this resolution which was adopted in the case of another resolution of considerable importance—namely, that it be referred to the committee to consider and to shape in a form acceptable to the section; and if agreeable to the chairman I should suggest that the same distinguished committee serve as members of that committee.

Mr. BABSON. I gladly accept that suggestion. How will the move be made?

Mr. HOLLANDER. I think it need simply be handed in to the chairman of that committee.

Papers read by title before adjournment of this session:

Memoria sobre finãnzas e impuestos, by Pedro Gálvez Portocarrero.

Brazil: Contribution to her economic and financial study from 1888 to 1915, by Álvaro de Menezes.

La hacienda pública y el crédito del Perú, by Enrique Ramírez Gastón.

Organización del comercio exterior en Europa con destino al Uruguay, especialmente de artículos manufacturados, by Octavio Morató y J. West.

MEMORIA SOBRE COMERCIO, FINANZAS E IMPUESTOS.

Por PEDRO GÁLVEZ PORTOCARRERO,
Ex-Ministro de Hacienda y Crédito Público de Guatemala.

(*a*) I. *Comercio.—Recursos y otras condiciones locales.*

La República de Guatemala tiene dos millones de habitantes; de los cuales, un millón cuatrocientos mil, son de raza aborigen, quince mil negros de raza pura; y el resto es de raza blanca, pura y mezclada. Esta población habita en ocho ciudades, 491 pueblos y aldeas y en más de dos mil fincas rústicas.

Los hijos de los habitantes de raza aborigen, merced a los patrióticos esfuerzos del Presidente de la República Señor Licenciado Don Manuel Estrada Cabrera, en los últimos diez y siete años, ya concurren a las escuelas públicas, en donde se les enseña a leer, escribir, contar, moral y urbanidad, geografía e historia de Centro-América; instrucción que promete, en breve plazo, la regeneración y cultura de esta raza desvalida, tan descuidada en épocas anteriores. Estos aborígenes, o indios como impropiamente se les llama, son de carácter dulce y pacífico de costumbres sencillas y sobriedad exagerada; muy respetuosos a las autoridades constituidas y a sus patrones; y los servicios que prestan a la agricultura son inapreciables.

Los habitantes de raza blanca pura ó mezclada, son, en lo general, amantes del trabajo; de costumbres morigeradas; en su mayoría, saben leer y escribir; su cultura es proverbial, lo mismo que su carácter bondadoso y hospitalario; se distinguen por su hábil disposición para las bellas artes; de ellos se forman las clases dirigentes del país, tanto en la política, como en el comercio, agricultura e industrias; y su respeto a la ley, lo demuestra el orden en el interior, que, hace más de quince años, se halla inalterable y sólidamente establecido en esta República.

El sistema de Gobierno en Guatemala es republicano democrático; por la Constitución, los habitantes, nacionales y extranjeros, gozan de todas las libertades y garantías que disfrutan las naciones más civilizadas. La esclavitud fué abolida en 1824. En América, Guatemala fué la primera que dió este bello ejemplo.

En este país no existen monoplios de clase alguna; el comercio y las industrias de cualquier género pueden ejercitarse, sin distinción, por nacionales y extranjeros; no se necesita licencia de las autoridades para establecer empresas de comercio o industriales; salvo la fábricación y venta de licores, pólvora, salitre, municiones y tabaco, que son ramos estancados.

Una familia decente, compuesta de cuatro o cinco personas, puede vivir en este país, con todas las comodidades indispensables, gastando ciento cincuenta pesos, oro, al mes.

Los salarios de los peones que se ocupan en las labores agrícolas, son, de doce a veinte centavos oro por día, según la tarea que desempeñan.

Los artesanos que trabajan en los talleres de carpintería, herrería, sastrería, zapatería, y los albañiles y sirvientes domésticos, ganan al día, de quince á cuarenta centavos oro, según su habilidad.

Los dependientes de las empresas eléctricas y ferrocarriles, de establecimientos de comercio y crédito, gozan mejores dotaciones, que las anotadas en los dos párrafos precedentes, aunque moderadas.

(*b*) *Desarrollo de las industrias domésticas.*—Las leyes vigentes en Guatemala, para alentar la introducción de nuevas industrias en el país, son muy liberales; conceden privilegio hasta por diez años, para su exclusiva explotación; franquicia de derechos de importación de máquinas, materias primas

e instrumentos útiles; y exención del servicio militar y cargos concejiles, a los operarios.

Guatemala ofrece vasto y rico campo a los capitalistas extranjeros que quieran venir a establecer nuevas industrias, las que más se necesitan, que son: fábricas de papel de todas clases, de loza, cristalería y vidrios planos, fósforos, sacos de yute, materia prima que pueda ser cultivada en este país y laboratorios de productos químicos.

Los indios de los departamentos occidentales de esta República, fabrican, en gran escala, tejidos de lana y de algodón, para su uso y para la exportación; y los de oriente fabrican cordelería y toda class de jarcia de maguey y sombreros de palma, en cantidades considerables, para consumo del país y para el exterior.

(c) *Comercio internacional entre países americanos.*—Guatemala envía á México y a los otros Estados de Centro-América, sombreros, jarcia, pieles curtidas, tejidos de lana y algodón, calzado, maíz, frijol, azúcar, obras de escultura y de pintura, libros impresos; de los mismos países importa: añil, bálsamo, aguardiente, tabaco, esteras, artículos de talabartería y ferretería, ganado vacuno, caballar y mular. Este comercio de exportación y de importación, por la vía terrestre, asciende, por año, a tres millones de pesos oro, poco más o menos.

El comercio de Guatemala con los países de la América del Sur es de poca importancia por la carencia de medios de comunicación directa con las Repúblicas situadas al Este y al Norte de la América del Sur; pero se abriga la esperanza que dentro de poco tiempo, por el canal de Panamá, nos pondremos en contacto directo con los puertos de las mencionadas Repúblicas; y que, entonces, nuestro comercio con aquellos países se desarrollará rápidamente.

Los Estados Unidos del Norte de América, ocupan el primer lugar en la escala de las naciones del antiguo y nuevo mundo, con quienes Guatemala mantiene relaciones comerciales.

Los principales establecimientos de comercio en este país, pertenecen a alemanes, belgas, chinos, franceses, ingleses y suizos, que importan mercaderías de sus respectivos países, a crédito, con largo plazo e interés moderado.

Si comerciantes norteamericanos, quisieran venir a establecer tiendas de comercio con efectos manufacturados en su país, a crédito, con plazo de seis meses, lo menos, y con interés no mayor de 6% anual, aumentaría la importancia del comercio de Guatemala con la Gran República del Norte de América.

(d) *La medida del comercio exterior.*—Los dos cuadros siguientes, formados con datos oficiales, manifiestan el valor en oro, de las mercaderías importadas y exportadas, en el último quinquenio, por los puertos de mar de esta República:

Importación de mercaderías extranjeras en la República de Guatemala, por la vía marítima, en el último quinquenio; con expresión de su procedencia y valor en oro.

Procedencia.	1910	1911	1912	1913	1914
Estados Unidos del Norte de América	$2,758,796.19	$2,685,164.07	$4,532,360.15	$5,053,059.73	$4,879,200.04
Alemania	1,459,130.48	1,592,657.29	2,250,861.82	2,043,329.29	1,842,738.15
Inglaterra	1,374,085.97	1,825,202.58	1,739,597.76	1,660,387.44	1,389,645.00
Francia	270,134.79	285,049.68	436,881.55	402,025.45	317,631.00
Japón y China	232,606.74	187,748.30	307,937.48	305,151.12	221,462.55
Bélgica	119,797.24	136,013.69	146,431.46	121,543.09	171,507.89
España	81,256.50	95,333.56	115,934.68	111,474.85	131,234.12
Ytalia	70,467.59	134,797.27	96,495.71	125,316.21	123,004.71
Centro-América	54,108.94	18,271.28	44,074.74	29,7[illegible]7.55	35,175.51
México	41,659.19	43,820.81	135,971.05	113,577.93	104,207.00
Otros países	6,275.46	9,362.50	15,915.93	106,675.02	115,308.90
Suma	6,468,319.09	6,514,421.03	9,822,432.33	10,062,327.68	9,331,114.87

Exportación de efectos manufacturados y frutos del país, por los puertos de mar, de la República de Guatemala, en el quinquenio próximo anterior.

	1910		1911		1912	
	Unidades.	Valor en oro.	Unidades.	Valor en oro.	Unidades.	Valor en oro.
Azúcar y panela . libras..	9,812,743	$298,335.69	11,467,180	$344,015.40	12,917,743	$564,532.29
Bananos.......racimos..	1,225,684	367,705.20	1,725,884	526,711.20	2,222,304	666,691.20
Café..............libras..	66,455,018	7,349,395.46	77,457,241	9,273,909.31	72,301,485	10,988,521.22
Chicle ....do....	319,049	102,095.68	471,507	150,902.40	858,913	274,852.16
Cueros de res....piezas..	81,652	302,975.20	90,351	325,260.80	52,869	190,329.80
Efectos manufacturados en el país.......libras..	658,246	55,637.60	412,910	47,043.31	155,747	72,170.74
Hule..............do....	350,619	175,309.50	319,242	159,621.00	290,381	140,708.00
Madera caoba y cedro, pies cuadrados........	4,699,741	234,987.06	3,163,568	158,178.15	4,829,447	241,472.35
Pieles de venado. libras..	91,532	27,465.60	67,169	20,153.70	57,333	17,259.90
Suma............	....	8,913,906.99	....	11,005,795.27	....	13,156,537.66

	1913		1914	
	Unidades.	Valor en oro.	Unidades.	Valor en oro.
Azúcar y panela..............................libras..	11,635,072	$349,052.16	11,812,743	$354,382.30
Bananos..............................racimos..	2,752,283	825,669.90	3,390,470	1,017,141.00
Café..............................libras..	87,533,740	12,254,723.64	83,134,123	10,391,765.41
Chicle..............................do....	387,837	142,107.84	711,692	227,741.44
Cueros de res..............................piezas..	106,521	455,475.60	91,993	341,101.20
Efectos manufacturados en el país..........libras..	582,870	50,139.60	936,438	77,016.24
Hule..	260,646	1,100,323.00	29,534	14,767.00
Madera de caoba y de cedro.......pies cuadrados..	4,955,170	247,758.50	6,031,424	301,571.22
Pieles de venado..............................libras..	82,253	24,675.90	95,156	28,540.80
Suma..	....	14,449,926.14	....	12,754,026.61

Estos dos cuadros demuestran claramente que la balanza del comercio exterior, en los últimos cinco años, ha sido en favor de Guatemala.

Se desea la uniformidad de método, en el registro y clasificación de las mercaderías y en los requisitos respecto a facturas consulares, manifiestos y descarga de buques mercantes.

Para llevar a la práctica este laudable deseo, se necesita nombrar una comisión técnica para que, estudiando las leyes y reglamentos de todas las Repúblicas americanas, relativos al comercio de importación y exportación de mercaderías, forme un proyecto de ley, que contenga las disposiciones indispensables para lograr tal uniformidad.

Esta comisión deberá presentar el proyecto de referencia, dentro del término de un año, contado desde la fecha de su instalación, á la Secretaría de Relaciones Extariores del Gobierno de los E. E. U. U. de América, para que éste lo comunique á todos los Gobiernos de las otras Repúblicas americanas, solicitando su aprobación, para que tenga fuerza de ley en todos los países de la Unión Pan-Americana.

También se desea uniformar las tarifas para el cobro de los derechos de importación de frutos y efectos manufacturados, de las Repúblicas americanas.

Este deseo no es tan sencillo como el mencionado anteriormente; los países de este vasto continente, están entre sí, en muy distintas condiciones económicas, climátericas y sociales; los Estados Unidos de la América del Norte y México todavia necesitan de tarifas protectoras para sus innumerables fábricas de toda clase de efectos; mientras que las otras Repúblicas americanas, no necesitan de tal protección; cualquiera reforma inconsiderada, en la nueva tarifa general, o uniforme, para toda la América, podria causar la ruina de muchas empresas in-

dustriales, que hoy se hallan bien establecidas y en plena prosperidad. Me parece que, por ahora, lo más prudente es no tocar esta materia.

Pero no habrá inconveniente alguno, para impulsar el comercio internacional entre los países americanos, en declarar, desde luego, libre de derechos la importación de los frutos y artefactos siguientes:

1. Abonos animales, vegetales o minerales.
2. Alambre espigado para cercas y sus grampas.
3. Arroz.
4. Azúcar, panela y mieles de caña de azúcar.
5. Café en pergamino o en oro.
6. Cueros de res, secos o salados.
7. Frijol.
7. Maíz.
9. Maquinaria para la agricultura.
10. Papas.
11. Trigo.

Esta franquicia será obligatoria en todas las Repúblicas de América, previa la aprobación de los gobiernos respectivos.

II. FINANZAS E IMPUESTOS.

(*a*) *Impuestos.*—Para dar conocimiento aproximado, del sistema de impuestos fiscales y de su rendimiento anual, en Guatemala, anoto a continuación, fundado en datos oficiales, el producto obtenido en el año de mil novecientos catorce, de cada una de las rentas fiscales, que forman el Erario público de este país.

Productos en oro de las rentas fiscales de la República de Guatemala, et año de mil novecientos catorce.

Aduanas:	
Derechos de importación de mercaderías extranjeras	$1,630,640.64
Derechos de exportación de frutos del país	1,282,397.87
Renta de licores y ramos estancados:	
Impuestos sobre elaboración y venta de licores	345,469.51
Venta de tabaco, pólvora, salitre y cartuchos	10,401.25
Contribuciones directas e indirectas:	
Contribución de caminos	14,517.28
Exención de servicios obligatorios	37,005.00
Contribución sobre bienes raíces	22,261.47
Papel sellado, timbres y habilitación de libros y documentos	29,113.34
Impuesto sobre herencias y donaciones	15,445.32
Impuesto sobre venta y permuta de inmuebles	19,846.53
Impuesto sobre destace de ganado	73,594.65
Impuesto sobre elaboración de sal	228.78
Venta de terrenos baldíos	694.20
Total	3,481,615.84

Total: Tres millones cuatrocientos ochenta y un mil, seiscientos quince pesos, ochenta y cuatro centavos oro.

Estos datos demuestran que el sistema fiscal de Guatemala es sencillo, moderado y no grava industria nacional alguna, excepto las de licores y ramos estancados.

El producto anual de las mencionadas rentas fiscales es en la actualidad, suficiente para cubrir " con puntualidad " el valor del presupuesto de gastos del servicio público y los cupones de la deuda externa.

En esta República, no hay derechos diferenciales en la importación de mercaderías extranjeras á favor de Nación alguna; nacionales y extranjeros están sujetos al pago de los mismos derechos, de conformidad con las tarifas de importación de frutos y de efectos manufacturados.

(b) *Inversión de capital extranjero.*—Existen en este país, fuertes capitales pertenecientes a alemanes, ingleses y norteamericanos, invertidos en el comercio, agricultura y empresas eléctricas y de ferrocarriles; produciendo pingües utilidades. Todavía queda extenso campo para emplear con provecho nuevos capitales extranjeros.

(c) *Créditos y bancos.*—Los bancos establecidos en esta República han prestado siempre poderoso y oportuno auxilio al comercio y a la agricultura, proporcionándoles los fondos necesarios para la explotación y ensanche de sus empresas; siendo de notarse que en Guatemala nunca ha quebrado banco alguno, ni suspendido sus pagos.

La Unión Bancaria Panamericana, constituida sobre bases sólidas, promovería el desarollo del comercio internacional americano, mediante la intervención de los bancos para garantizar los créditos concedidos á los comerciantes de sus respectivos países.

Para alcanzar tan benéfico resultado, sería conveniente nombrar una comisión compuesta de un delegado técnico para cada república americana. Los delegados deberían ser nombrados por los gobiernos respectivos.

Esta comisión tendría el encargo de formar el estatuto, o constitución de la Unión Bancaria Panamericana, dentro del término de un año; y presentarlo al Secretario de Hacienda de los E. E. U. U. de América, para que éste, por medio del Secretario de Relaciones Exteriores, recabe la aprobación de los gobiernos de las repúblicas americanas; en el caso de enmiendas propuestas por los mencionados gobiernos, la comisión debería tener la facultad de admitirlas o desecharlas.

La admisión del Estatuto, o constitución de referencia, por la mayoría de los gobiernos americanos, sería suficiente para darle fuerza de ley en las repúblicas que le hubieran concedido su aprobación; pudiendo agregarse á la Unión Bancaria Panamericana, las otras repúblicas americanas, disidentes, que lo soliciten más tarde.

(d) *Un tipo común de moneda.*—La moneda de los Estados Unidos del Norte de América es la mejor del mundo; las otras repúblicas americanas deberían adoptar la ley monetaria de la gran república del Norte; pero no es éste el momento oportuno para cambio tan radical en la moneda circulante en estos países; porque aumentaría las dificultades que están sufriendo todos los mercados de América, a consecuencia de la perturbación del comercio, motivada por la presente guerra mundial.

Cuando se restablezca la paz en Europa, podrá llevarse a buen fin, la adopción de la citada ley monetaria, por las repúblicas latinoamericanas.

BRAZIL: CONTRIBUTION TO HER ECONOMIC AND FINANCIAL STUDY FROM 1888 TO 1915.

By ÁLVARO DE MENEZES,

Sometime Professor, Polytechnic School of São Paulo.

In these sad hours of the European war we of the Americas, moved by the same instinct, are meeting in a solemn assembly of peace and of work.

The social conception which by common agreement is named "Pan American," and which in time of peace seemed to lead only to imaginary solutions, is perhaps destined to become in the future the supreme formula capable of solving

the problem of the reasonable and definite approximation of all the people of our Continent.

When at last the great American questions of material, moral, and social reciprocity can be debated and solved in a solemn congress of the nations; when a higher conception of fatherland no longer restrains the immense conquests of the human mind within the narrow geographical boundaries which are placed arbitrarily around each State; when even the internal dissentions consequent upon human contingencies can be solved by a great and austere tribunal of the nations, impartial and just, of lofty and serene judgment, and inaccessible to passion; in such glorious era Pan Americanism will have attained the highest objective at which it could aim, and in the history of humanity will be written the most brilliant page relative to the betterment of our species.

But such a vast program could never be the work of a single generation; not one conquest has humanity made to the present day which has required less than a century for its accomplishment. A generation constructs, a second one perfects, and the third finally realizes and inaugurates; and that only when human passions give a truce to the social struggles and permit an harmonious evolution of the three terms of this magnificent series.

The generation to which we belong is in this grave historical moment constructing the first term for the beginning of the progression of American community. For the present the material expression of this conception is only formed by these solemn assemblies where are gathered together representatives of the mind of the three Americas united in a fraternal reunion of ideas in the ardent aim of building indestructibly.

May the American Continent obtain from this gathering a more intimate knowledge of its political unities in order that the resultant of their respective efficiencies can attain a higher degree of betterment for the great human communion.

It is not enough, however, that we know one another only in the present; it becomes indispensable that we show to one another the services already rendered to the cause of progress in the short history of each one of us. The efficiency of a race is only obtained through the three terms of a syllogism: One of the premises lies in the past, the second is in the present, and from them flows in logical sequence—the future.

In a gathering such as this the anxiety to become at once useful to one another by a mutual study of present conditions in each of our countries tends greatly to a neglect of that calm and reasonable comparative study of what has been accomplished by our nationalities in the past, which likewise is necessary to a clear forecast of the future.

One has the clear idea that the nations of the three Americas are trying to become better acquainted with one another, anxious for new and useful relations, since the bonds that for four centuries of traditions linked them with the ancient world were suddenly broken by unfortunate events. Lack of time does not permit delay for a more intimate acquaintance; the intimacy will come later. Now, what is needed is the substitution of the interchange of ideas for that of merchandise, and the formula which dominates the present is to expand.

To try to resist this impetuous current would be to attempt the impossible. There is only one way of making its effects beneficial—to direct it through rational channels, illuminating its path by the concentrated study of the near past of the young American organization.

This was the aim that animated the compilation of the present unpretentious work on the economic and financial conditions of Brazil during the last 28 years, taking as the beginning of this economic cycle the period in which the greatest social reform happened in that country. In this—the result of a

detailed analysis whose only value lies perhaps in numerical statistics which almost entirely form it—the author pretended in presenting it merely to emphasize the formidable qualities of that immense political organism in resisting the blows which were logically brought about by the radical changes realized in that country in a little over a quarter of a century.

Two great reforms have been made in Brazil in the last 28 years—one a social one, the transformation of the labor system, brought about peacefully, the national conscience in harmonious accord; the other a political one, installing the republican idea in the free land of this continent by ridding America of its last throne.

If we consider for a time the conditions, sometimes tragic, under which these notable conquests have been realized in so many other countries, as well as the long influence that the same had on their respective economic situations, the result on the mind of every impartial observer will surely greatly decrease the importance of the transitory crisis suffered by the immense Republic of the South, which, due to the efficiency of her inexhaustible resources, will, in the near future, be the provider of a great part of humanity, reviving in modern times the biblical story of the land of promise.

The free expression of all opinions on universal themes on the betterment of American peoples is the essential reason for this congress. Such is the starting point from which Pan Americanism will build with the accumulated tenacity and effort of several generations a formidable and permanent structure; and when, in the days of a remote future, the historians of the generations that will follow ours will study from a distance the austere historical profile which Pan Americanism will then probably present, they will say that such work was indeed great and worthy of the successors of Columbus, of Washington, of Bolivar.

International trade of Brazil from 1888 to 1914, compared with the gold premium and the monetary circulation.

Year.	Average rate of exchange.	Exports.		Imports.	
		Brazilian currency.	English currency.	Brazilian currency.	English currency.
1888	25 [illegible]	212,592,000$	£22,378,000	260,998,000$	£27,473,000
1889	20 [illegible]	216,641,332$	23,551,000	316,256,933$	34,395,000
1890	21 [illegible]	272,144,530$	24,522,000	325,246,596$	29,306,000
1891	15	417,753,805$	26,110,000	322,613,475$	20,164,000
1892	12 [illegible]	432,362,395$	21,618,000	382,062,012$	19,097,000
1893	11 [illegible]	606,052,556$	29,275,000	328,589,765$	15,873,000
1894	10 [illegible]	601,046,334$	25,276,000	341,539,331$	14,363,000
1895	9 [illegible]	696,360,354$	28,834,000	470,087,943$	19,473,000
1896	9 [illegible]	693,057,870$	26,173,000	552,947,203$	20,882,000
1897	7 [illegible]	669,774,098$	21,538,000	557,463,260$	17,927,000
1898	7 [illegible]	636,285,393$	19,057,000	563,037,893$	16,864,000
1899	7 [illegible]	575,758,786$	17,844,000	374,468,282$	11,606,000
1900	9½	946,909,363$	37,482,000	434,178,773$	17,186,000
1901	11¼	860,826,694$	41,240,000	448,353,353$	21,484,000
1902	12	735,940,125$	36,797,000	471,114,120$	23,556,000
1903	12	742,632,278$	37,131,000	486,488,944$	24,324,000
1904	12	776,367,418$	38,818,000	512,587,880$	25,629,000
1905	15 [illegible]	685,456,606$	45,515,000	454,994,574$	30,212,000
FOUNDATION OF THE "CAIXA DE CONVERSÃO."					
1906	16	799,670,295$	£53,311,000	499,286,976$	£33,286,000
1907	15¼	894,657,159$	56,850,000	611,170,841$	38,836,000
1908	15 [illegible]	705,790,611$	44,571,000	567,271,636$	35,824,000
1909	15 [illegible]	1,016,590,270$	64,200,000	592,875,927$	37,443,000
1910	16 [illegible]	939,413,449$	59,325,000	713,863,143$	45,082,000
1911	16 [illegible]	1,003,924,736$	67,518,000	793,716,446$	53,381,000
1912	16 [illegible]	1,119,737,180$	75,455,000	951,369,558$	64,110,000
1913	16 [illegible]	972,730,516$	65,548,000	1,007,495,400$	67,890,000
1914	15 [illegible]	750,979,758$	47,024,000	561,853,181$	35,181,000

International trade of Brazil from 1888 to 1914, etc.—Continued.

Year.	Trade balance.		Paper money in circulation.			Average value of 1 pound.	Gold premium.
	Brazilian currency.	English currency.	Issued by the State.	Issued by the banks.	Total.		
							Per ct.
1888	− 48,406,000$	−£5,095,000	188,869,263$	16,419,100$	205,288,363$	9$500	6.9
1889	− 99,615,601$	− 10,844,000	185,819,213$	11,337,350$	197,156,563$	9$186	3
1890	− 53,102,066$	− 4,784,000	171,081,414$	127,910,610$	298,992,024$	11$098	24
1891	+ 95,140,330$	+ 5,946,000	167,611,400$	346,115,960$	513,727,360$	16$000	80
1892	+ 50,300,383$	+ 2,521,000	215,100,000$	346,115,960$	561,215,960$	19$948	124
1893	+277,462,791$	+ 13,402,000	285,744,750$	346,115,960$	631,860,710$	20$702	133
1894	+259,507,003$	+ 10,913,000	367,358,652$	345,000,000$	712,358,652$	23$778	167
1895	+226,272,411$	+ 9,361,000	337,351,527$	340,714,370$	678,065,897$	24$150	171
1896	+140,110,667$	+ 5,291,000	371,641,023$	340,714,370$	712,355,393$	26$480	198
1897	+112,310,838$	+ 3,611,000	439,614,276$	340,714,370$	780,328,646$	31$096	249
1898	+ 73,247,500$	+ 2,193,000	788,364,614$	(1)	788,364,614$	33$388	275
1899	+201,290,504$	+ 6,238,000	733,727,153$	(1)	733,727,153$	32$266	263
1900	+512,730,590$	+ 20,296,000	699,631,719$	(1)	699,631,719$	25$263	184
1901	+412,473,341$	+ 19,765,000	680,451,058$	(1)	680,451,058$	20$869	135
1902	+264,826,005$	+ 13,241,000	675,536,784$	(1)	675,536,784$	20$000	125
1903	+256,143,334$	+ 12,807,000	674,978,942$	(1)	674,978,942$	20$000	125
1904	+263,779,529$	+ 13,189,000	673,739,908$	(1)	673,739,908$	20$000	125
1905	+230,462,032$	+ 15,303,000	669,492,000$	(1)	669,492,000$	15$060	69
			FOUNDATION OF THE "CAIXA DE CONVERSÃO."				
1906	+300,383,319$	+£20,025,000	664,792,960$	40,835,040$	705,628,000$	15$000	69
1907	+283,486,318$	+ 18,014,000	664,792,960$	99,907,040$	764,700,000$	15$737	77
1908	+138,518,975$	+ 8,747,000	664,792,960$	59,276,040$	724,069,000$	15$835	78
1909	+423,714,343$	+ 26,757,000	664,792,960$	188,939,040$	853,732,000$	15$835	78
1910	+225,550,306$	+ 14,243,000	664,000,000$	260,995,000$	924,995,000$	15$835	78
1911	+210,208,290$	+ 14,137,000	637,000,000$	354,002,000$	991,002,000$	14$869	67
1912	+168,367,622$	+ 11,345,000	610,000,000$	403,061,000$	1,013,061,000$	14$840	67
1913	− 34,764,884$	− 2,342,000	601,000,000$	296,000,000$	897,000,000$	14$840	67
1914	+189,126,577$	+ 11,843,000	825,478,000$	(2)	825,478,000$	15$970	79

[1] Absorbed by the State.
[2] Closed after August.

All who have followed the economic evolution of Brazil, at least during the last quarter of a century, will certainly still remember the grave depression which her monetary system suffered, in relation to gold, between the years 1889 and 1898, during which period the average rate of exchange dropped from 26¼ to 7$\frac{3}{16}$ pence, the average value of the pound sterling rising from 9$186 reis to 33$388 reis; that is, the gold premium rising in eight years 275 per cent (average exchange in Brazil in 1898).

And whoever investigated the economic factors characterizing the situation in that period would find:

(*a*) That the balance of Brazil's international trade in the years 1889 and 1890 was negative, and therefore unfavorable to the country. In these years the imports exceeded the exports by 99,616 and 53,102 contos, or £10,844,000 and £4,784,000, at the average exchange rates for those years.

(*b*) That in 1890 the balance of Brazil's international trade being still negative and in spite of the small increase in the amount of exports, which only varied from 216,641 contos in 1889 to 272,144 contos in 1890, the monetary circulation rose, nevertheless, abruptly from 171,000 contos to 299,000 contos because of the injection of 128,000 contos of paper money which the issuing banks distributed broadcast.

(*c*) That in 1891 the fiduciary circulation was overloaded by 216,000 contos more, again injected by the banks, raising to 514,000 contos the mass of paper money, which thus exceeded the amount reached by the total exports of the country in that year (417,753 contos).

(*d*) That from 1893 on to 1898 the annual balance of exports over imports diminished continuously, reaching in the last of these years the minimum of £2,193,000; that in this period the value in gold of the exports of the country also decreased from £29,275,000 in 1893 to £19,057,000 in 1898; and that, to aggravate these violent symptoms of economic crisis, up to 1898, 274,000 contos more were being injected into the fiduciary circulation, which, in pathological plethora, was inflated to 788,364 contos, in contrast with the profound depression of the value in gold suffered by the national production during these few years.

Plainly dominating the situation, therefore, were the two grave economic phenomena: Continual decrease in the amount of gold entering the country—a natural result of Brazil's unfavorable position with regards to the balance of international trade; and disorderly, excessive, and therefore hurtful increases of the fiduciary circulation, each time in greater disaccord with the necessities of national production.

The consequence, fatal and inevitable, of such premises was not long in coming.

The buying power of the fiduciary money diminished speedily by 440 per cent, while the respective issues were being increased (the paper money losing in value what it was gaining in volume), and the exchange dropping suddenly from the maximum rate of 27 pence per 1,000 reis to the minimum of 5 pence, the pound sterling attaining, therefore, the value of 48$000 reis instead of 8$900 reis, for which value it could be exchanged in 1899.

Many were the suggestions that were made during the most acute period of that grave economic crisis through the congress, through the press, through pamphlets, and, in short through every medium of expressing ideas. To put in practice all measures which, in the judgment of their authors, could avert a catastrophe, was being urged upon the administrators of the country, from the common and infallible ones such as reduction of public expenditures, reduction of the railway tariffs, immediate suppression of almost all taxes, which, under guise of "home remedies," are generally prescribed whenever a country traverses abnormal economic situations, to more complex propositions, such as creation of new taxes, to face the deficits which were accumulating in the budgets of the union since 1894; removal of part of the paper money from circulation in the country; suppression of the issuing power of the regional banks; agreement with foreign creditors for the temporary interruption of the running expenses of the gold debt; and many other suggestions of more or less value, which the dominating empiricism did not hesitate to prescribe, no matter how incoherent would be the simultaneous application of all the suggested and in many instances contradictory measures.

It was under such auspices that, on the 15th of November of 1898, a new administration of the country was installed. Its officials put into effect a series of measures, characteristic of that administration which, by their rigor and speedy application, caused an energetic reaction on the credit of the Nation. The first symptom was a drop in the gold premium to 184 per cent within two years, although at the height of the crisis the premium had reached 440 per cent, its average during the whole crisis being 275 per cent.

The characteristics of the situation encountered by the Government which came to power in 1898 were accordingly the following:

Successive and uninterrupted deficits in the budgets since 1894, which reached the amounts of 102,409, 18,901, 40,393, and 78,139 contos in the years of 1894, 1895, 1896, and 1897, respectively.

The balance of international trade in continuous decrease since 1894, showing the following values for the above years: £10,913,000, £9,361,000, £5,291,000, and £3,611,000.

Annual decrease in exports since 1895, the values being 696,360, 693,057, and 669,774 contos for the years of 1895, 1896, and 1897, respectively, or, at the average rate of exchange for those years, £28,834,000, £26,173,000, and £21,538,000.

Imports, on the other hand, increasing in paper value, from 1893 to 1897, and amounting to £328,590, £341,539, £470,088, £552,947, and £557,463, respectively.

The foreign debt of the country having reached a total of £48,000,000, or, at the average rate of exchange for 1898 (7$\frac{3}{16}$), 1,600,000 contos, which called for yearly interest payments of £2,360,000, nearly 80,000 contos (paper) at the exchange rate of the year.

And, finally, the paper money circulating in superabundant amounts, having quadrupled in volume in the short interval of nine years, from 1889 to 1898, and having reached the maximum of depreciation since the existence of Brazil as a nation.

A series of measures was then put into practice, some direct, others indirect, but all aimed at the desired end, namely, valorization of the monetary system, reorganization of the country's production, reduction of excessive public expenditures, and postponement of everything that was not indispensable to the administrative machinery.

Dealing with the general revenues of the nation, a measure was introduced in 1900 for the collection in gold of a part of the custom duties with the aim, not only of restraining as much as possible the excessive shipment of gold, a result of the exaggerated imports in the years preceding 1898, but also of making compulsory the entrance of metallic coin into the country; part of the gold collected for custom duties being specially applied to provide funds for the carrying expenses of the foreign debt. The budget of the union showed great reductions in the annual expenditures, some of the public departments realizing economies of more than 50 per cent. With the foreign creditors of the country an agreement was made having as its basis the temporary suspension of the installments due on the loans, the postponed installments being consolidated into a new funding loan amounting to £8,613,717, at par, and bearing interest at 5 per cent. To assist commerce, the Government, in 1900, put at the disposal of the Banco da Republica the amount of £1,000,000, about 25,000 contos at the average exchange for that year (9½ pence); this being in addition to the assistance rendered to this bank by the treasury, which opened a credit of 25,000 contos in paper and issued 114,000 contos more in bonds to secure the liabilities of the bank.

Furthermore, in order to neutralize the disastrous effects of the superinflation of paper money in circulation, the resolution was made and put into practice to cremate a part of it, resulting in the elimination up to 1905 of 119,000 contos, or more than 15 per cent of the total mass which was in circulation in 1898.

These measures, even though resented by the public at large, when put into practice, because of some of their effects, had healthful consequences, which were reflected—

(1) In the rate of exchange, which rose gradually from 1900 on, having already reached 16 pence in the latter part of 1905.

(2) In the value of exported product, which increased year by year, almost without interruption, amounting in 1905 to £45,000,000 instead of the £18,000,000 in which it was ciphered in the year 1899.

(3) In the balance of international trade, which rose from the £2,000,000 shown in 1898 to more than £15,000,000 in 1905.

(4) In the normalization of the monetary system in circulation, which, reduced to 669.492 contos in 1903, corresponded almost exactly to the total value of exports in that period, about 120,000 contos having been removed from circulation since 1898.

The designs of the public administration seemed accomplished by the energetic application of the above-mentioned measures when, in 1905, there came up for debate under the appearance of a complete paradox the following proposition, presented by those States called "cafeeiros" (coffee growers), in which public and private wealth is directly or indirectly maintained through the profits arising from the cultivation of coffee:

The rapid valorization experienced by our circulating medium in six years, in spite of more than doubling its relative buying power, due to the equivalent rise in the rate of exchange, has, however, greatly disturbed our economic conditions, because it is impossible to modify with equal speed the scale of salaries, the price of the staple products of national production, or even the railway tariffs in force, these modifications being possible only gradually and never in the hasty progression which the rate of exchange is bound to follow. The result is that what we receive in paper money in payment for the coffee that we export decreases every year in volume, even if its value increases, and is being absorbed by the cost of production, which continues to be paid in paper and not in gold and to be figured on rates of exchange anterior to those of the present day.

The thesis was true, even though the phenomenon was not due to the offered reason alone and was rather the result of complex causes, the above being by no means the principal one. The foremost reason for the noticeable anomaly was the rapid increase in the production of coffee, which far exceeded the requirements for consumption. Although this article of diet is classed among those of secondary elementary importance and suffered, besides, heavy competition from other products, mainly from tea, an enormous expansion in the production of which was going on in the British colonies of Asia, nevertheless the cultivation of coffee in Brazil was increasing out of measure, the plantations covering a vast area of the national territory, aggregating nearly half a million square kilometers, increasing altogether out of proportion with the natural and limited increase in its consumption in those countries to which it was exported.

In order to obtain a faint idea of this expansion it is enough to recall that the coffee exported through the port of Santos, which represents about three-fourths of the total production of Brazil, beginning with the crop of 1893–94 up to that of 1906–7, followed this course:

Coffee exported through Santos.

Crops.	Bags of 60 kilos.	Tons of 1,000 kilos.	Average price per kilo.			World stock disposable.	
			In Santos.	In Havre.	Equivalent to—	Bags of 60 kilos.	Tons.
			Reis.	*Francs.*	*Reis.*		
1893–94	1,686,389	101,183	1.477	2.00	1.760	2,146,160	128,770
1894–95	4,007,380	240,443	1.389	1.86	1.785	3,049,860	182,980
1895–96	3,093,528	185,612	1.426	1.66	1.680	2,505,330	150,320
1896–97	5,104,486	306,269	1.098	1.12	1.289	2,962,500	237,750
1897–98	6,152,594	369,156	.911	.80	1.032	5,412,000	324,720
1898–99	5,569,650	334,179	.788	.72	.945	6,147,830	368,870
1899–1900	5,711,732	342,704	.760	.80	.920	5,725,830	343,550
1900–1901	7,973,148	478,389	.616	.90	.830	6,781,160	406,870
1901–2	10,165,044	609,903	.524	.82	.670	11,219,160	673,150
1902–3	8,349,783	500,987	.462	.68	.544	11,795,000	707,700
1903–4	6,397,441	383,846	.520	.78	.624	12,241,660	734,500
1904–5	7,422,758	445,365	.581	.90	.630	11,153,330	669,200
1905–6	6,982,885	418,973	.449	.92	.552	9,625,000	577,500
1906–7	15,392,170	923,530	.421	.82	.503	16,399,954	983,997

Total average increase in production, 603,424 tons, or 10,057,000 bags; annual average increase, 46,417 tons, or 773,610 bags.

Total average increase in stock, 603,584 tons, or 11,159,000 bags; annual increase (average), 51,506 tons, or 858,433 bags.

Total average increase in price (gold), 1 franc; annual average increase, 0.146, or 7.3 per cent.

This table gives a very clear idea of the economic problem which presented itself:

(1) The production rising from 103,000 to 923,000 tons, with an average increase of 774,000 bags per year.

(2) The stock of coffee in the whole world identically increasing in volume from 130,000 to 980,000 tons, and this in the period of 14 years.

The result was the drop in the price of the coffee, according to the law of supply and demand. The price of an article, being the arithmetical quotient of the relation between supply and demand of the article, will evidently drop either from an increase in the supply or a decrease in the demand.

The situation was not, therefore, due to the rate of exchange, which had no influence whatsoever upon the factors which produced it. On the contrary, precisely when the rate of exchange dropped to the minimum of 5 pence per 1,000 reis, in 1898, and in the three years which followed, also years of bad rates, the production was increasing immeasurably, passing from 5,569,000 bags, or 334,000 tons, in 1898–99 to 10,165,000 bags, or 610,000 tons, in 1901–2; and as a result the world's stock rose to 734,500 tons, or 12,242,000 bags, in 1903–4, and the price of the article fell in this period to the minimum of 29 francs per bag of 50 kilos—that is, 0.58 francs per kilo—a limit to which the price of coffee had never before dropped.

A measure regulating the Brazilian monetary market had been urged for some time. Reasons put forth in a convention which became famous on account of the economic and financial measures which originated from it, harmonizing with the views of the high administrations of the States of São Paulo, Rio de Janeiro, and Minas Geraes, caused the Federal Congress to legislate on the creation of a "Caixa de Conversão" (converting house), intended to bring about a gradual substitution of the paper money in circulation in the country for bills convertible into gold through this house at the fixed rate of 15 pence per 1,000 reis. This creation, important even though imperfect in its conception, as shown by the fact that at present it is used only to keep the deposits of gold which either the Government or individuals may make, was instituted on December 6, 1906 (Law No. 1,575 of said date), and began operations on the 22d of that month. Not possessing any sinking fund to organize a reserve for the gradual redemption of the existing paper money, and its function being restricted to keeping gold at the order of the depositors and to pay at sight and integrally the value of the deposits, such an institution does not yet possess the means for a true financial defense of the country's credit, and therefore has not the power of preventing the fluctuations experienced by the Brazilian monetary standard.

Nevertheless this institution has already rendered the country useful services, the chief one being the assistance, to a certain degree, in normalizing the exchange, beginning with 1906, up to the time when the absorbing drainage of gold to supply the treasuries for the present European conflagration deviated to them a great part (almost 60 per cent) of the deposits which had been accumulating for the last seven years—from 1906 to 1913—the operations of the "Caixa de Conversão" having been closed by decree of the Government of Brazil on the 15th of August, 1914.

Having recalled these preliminaries of the Brazilian finances through the occurrences of the last quarter of a century, it is now an opportune time to

begin the study of the present financial condition, trying to emphasize all its characteristics, in consideration of the grave economic crisis of 1892 to 1901, with the object of deducing from such consideration conclusions which will authorize a well founded and firm prognosis for the years to come.

At the end of the economic year of 1913 this was the condition of the country:

(1) Exports to the value of 972,730 contos, or £65,548,000, against the amounts of £75,455,000 for 1912, £67,518,000 for 1911, and £59,325,000 for 1910, and therefore almost maintaining the average for the last three years.

(2) Imports rising to £69,152,000, and therefore exceeding by far those of 1912 and 1911, which were valued at £64,110,000 and £53,381,000.

(3) Balance of international trade, unfavorable to the country, and having a negative result of £2,342,000, against the positive balances of £11,345,000 and £14,137,000 shown in the two preceding years, but which, however, had been decreasing since 1909.

(4) However, the paper money in circulation gradually diminishing since 1910, and not exceeding 601,000 contos by the 31st of December, 1913; that is, amounting to a little more than 60 per cent of the total value of exports.

(5) But the gold on deposit in the "Caixa de Conversão" noticeably diminishing during the year 1913, which ended with the stock of 296,000 contos only, instead of the 403,000 in existence one year before.

In spite of the bad consequences, this last phenomenon was, however, logical: The balance of international trade having experienced a drop of 203,000 contos, or £13,000,000, from 1912 to 1913, there was a corresponding withdrawal of gold from the "Caixa de Conversão" (where its effect could not but be felt), in order to provide for the payment to foreign countries, in gold, of the equivalent amount due to the excessive imports for the year of 1913. And that the withdrawal from the balance in existence in said "Caixa de Conversão" was not greater, was due to the credit operations arranged in the year of 1913, by the Federal Government and the States of São Paulo, Parana, and Bahia, amounting to more than £20,000,000, which, having for their principal object the liquidation of foreign liabilities, prevented greater shipments of gold from the country, where the metallic reserves were not enough to meet the amount of the liabilities of 1913. Add to this the deficit which was resulting from continued disproportion between the general returns of the nation and its expenditures, and it will be seen that the financial situation of Brazil at the beginning of the year 1914, needed immediate and energetic measures in order to return to normal.

What has been stated makes it evident that the abnormal financial situation at the end of 1913 was due essentially to two causes:

(1) Excessive imports to such a degree that the balance of international trade became negative, causing great shipments of gold at the expense of the deposits in the "Caixa de Conversão."

(2) Repeated deficits in the budget, amounting to 132,000, 149,000, and more than 200,000 contos in the years of 1911, 1912, and 1913, respectively, and making it impossible for the Government of the country to meet the debt which it had contracted with domestic and foreign creditors.

However, the remaining economic factors did not bear the somber colors which characterized the crisis of 1898–1901. Far from it. Exports were maintained at a little below the average for the three years. The amount of paper money was much smaller in proportion to the exports, being only 601,000 contos at the end of the year; and the rate of exchange scarcely fluctuated between the extremes of 15¾ and 16¼ pence per 1,000 reis.

The course to follow was, therefore, marked out: The producing classes should restrict their imports to the minimum, at the same time promoting,

by every means, the shipments of the total of their production; and the public administration should limit to the minimum its expenditures, ridding the governmental machinery of every dispensable, dedicating itself in earnest to meet the debts of the treasury.

The first of the measures mentioned was put into effect by the producing classes of the country, impelled to do this by the most elementary intuition, and its effective results may be noticed by a survey of the following table, which presents the imports of Brazil in 1914 in contrast with those for 1912 and 1913:

Imports of foreign merchandise into Brazil for the years 1912, 1913, and 1914.

[At average rates of exchange for those years.]

1912, £64, 110, 000, or	951, 369 contos.
1913, £76, 890, 000, or	1, 007, 495 contos.
1914, £35, 181, 000, or	561, 893 contos.

The year of 1914 showed, therefore, a reduction of 44 per cent in imports in contrast with 1913. And it must be considered that this fact was not due only to the impossibility of importing on account of the European war, but was due, rather, to the result of the foresight of the importing mechants of Brazil, because, even before the outbreak of the great conflagration in Europe, on August 1, 1914, imports showed a reduction of 34 per cent, in comparison with those for the same period of 1913, as shown in the following data:

Values of imports into Brazil from Jan. 1, to July 31, 1914	£26, 837, 017
Values of imports into Brazil from Jan. 1, to July 31, 1913	41, 083, 992
Amount of difference, 1914	14, 246, 975

Or about 34 per cent less than in the first seven months of 1913.

On August 3, when the exporting of the coffee crop was only in its beginning, the European conflagration broke out, with all the signs of a great world catastrophe, its first effect being the immediate suspension of almost all relations of international commerce. This helped also in restricting to a greater extent the imports into Brazil, principally from some of the nations at war, such as Germany, France, and Austria, whose products imported into Brazil in August and September of 1914 suffered reductions of 75, 70, and 76 per cent, respectively, as compared with the same months of 1913.

But in spite of the first abrupt interruption in the flow of imports which followed the declaration of war, business soon afterwards took up its normal course, and the country, which had up to August imported merchandise valued at only £26,837,017, or 402,000 contos, imported from then up to December 31, 1914, £8,344,000, or 152,000 contos more, or about 30 per cent of the value of the total imports for the year.

Let us now analyze the exports from Brazil in 1914. In the first seven months of the year, from January 1 to July 31, exports from Brazil amounted to £30,774,638, almost equal, therefore, to the amount exported in the same period of 1913 (£31,067,614). During the month of August, as a natural result of the war, and before transoceanic navigation was again normal, there was a temporary depression in the exports of Brazil, which experienced a drop of about 50 per cent, as compared with those for the same month of 1913; but, beginning with the month of September, the flow of exports became again normal, and shipments of the country's products were being made almost as usual, without the disturbances which could logically be expected from a state of war.

While, in 1913, Brazil exported 795,000 tons of coffee, she managed to export during 1914, 676,000 tons, the reduction being, therefore, only 12 per cent, which

was partly due to the fact that the crop of 1914 was much smaller than that of 1913.

In the exports of rubber, the second of the great products exported by Brazil, the same continuity was observed, total exports for 1914 being 33,531 tons against 36,231 tons for 1913—a reduction of only 8 per cent.

But, in spite of the fact that the export of the two principal Brazilian products was in weight almost normal, there was in contrast a noticeable reduction in their quotations, if we compare the average prices of 1914 with those of 1913. The decline in the price of coffee was about 28 per cent and in rubber nearly 17 per cent, on the average, resulting in a reduction of about £13,000,000 in the value of Brazilian exports; coffee and rubber forming 75 per cent of the total exports from Brazil.

There was, however, a favorable reaction in some other products, but not to the extent of offsetting the drop experienced by the two great supports of Brazilian wealth. Sugar exports in 1914, for instance, exceeded those of 1913 by 26,000 tons, or 5,800 contos (£360,000). Brazilian fruits exported showed also an increase of £346,000; exports of manganese gained £125,000 (61,000 tons). All these small increases added together, however, could not neutralize the decrease of £13,000,000 due to the above-mentioned causes.

The arithmetical difference between the exports, acounting to £47,024,000 and imports valued at £36,181,000, leaves, however, a positive trade balance of $11,843,000. It is easy to prove that such a balance is sufficient to meet the necessities arising from Brazilian liabilities in gold to foreign countries. The requirements for such payments in gold are the following:

1. Carrying expenses for the external debts of the federal Government.
2. Carrying expenses for the external debts of States and municipalities.
3. Interest on foreign capital invested in Brazil.
4. Shipments abroad for the accounts of foreigners residing in the country or of Brazilians abroad.

The *external debt of the union* is formed by all loans obtained and not yet wholly paid for. Their original amounts, amounts still due, dates when transacted, and rates of interest are shown in the following table, which has been made from official data from the department of finances.

External debts of the Brazilian Union on Dec. 31, 1914.

Year of loan.	Nominal value in pounds sterling.	Rate of interest.	Type.	Loan to be used for—	Present value in pounds sterling.	Yearly carrying expense, principal and interest.
		Per cent.	*Per cent.*			
1883	4,599,600	4½	89	Not declared	2,789,700	£171,533
1888	6,297,300	4½	97		4,258,000	254,583
1889	19,837,000	4	90		17,599,800	803,177
1895	7,442,000	5	85		6,978,800	423,360
1898	8,613,717	5	100	Funding loan	8,500,480	468,092
1901	16,619,320	4	100	Rescission bonds	13,142,580	606,800
1903	8,500,000	5	90	Port of Rio	7,783,100	516,655
1906	2,100,000	5	100	Lloyd Brazil	1,276,300	168,815
1908	4,000,000	5	96		2,044,800	142,240
1908	1,600,000	5	95½	Port Pernambuco	1,600,000	88,000
1909	4,000,000	5	100	E. F. Noroeste	3,962,000	218,100
1909	4,000,000	4	79½	E. F. Goyaz	3,953,320	178,153
1910	10,000,000	4	87½	Conversao	9,807,800	442,312
1911	4,500,000	4	92	Port of Rio	4,276,000	238,540
1911	2,400,000	4	83	Ceara Railway	2,400,000	102,000
1911	2,400,000	4	83	Bahia Railway	2,400,000	106,000
1913	11,000,000	5	97		11,000,000	660,000
Total	117,908,937				103,773,180	5,592,360

From the above table it can be seen that £5,592,360 is the yearly amount required for the carrying expenses of the external debts of Brazil; but shortly after the declaration of the great European war the Brazilian Government obtained from its bankers in London the suspension of a part of the carrying expenses for the period of three years, the accumulated amount being transformed into a new funding loan. This was done following the example of other nations and was due to the swift and violent blow caused by the interruption of a great part of the world's commerce.

The following were the loans which entered the moratorium of 1914:

1883—4½ per cent, yearly carrying expenses	£171, 533
1888—4½ per cent, yearly carrying expenses	254, 583
1889—4 per cent, yearly carrying expenses	803, 177
1895—5 per cent, yearly carrying expenses	423, 360
1908—5 per cent, yearly carrying expenses	142, 240
1913—5 per cent, yearly carrying expenses	660, 000
The yearly carrying expense being	2, 454, 893

And the annual expenses for carrying the federal debts being, therefore, reduced to those loans of—

	Per cent	Yearly expense.
1898, funding loan	5	£468, 092
1901, rescission	4	608, 800
1903, port of Rio	5	516, 655
1906, Lloyd Brazileiro	5	168, 815
1908, Port Pernambuco	5	88, 000
1909, E. F. Goyaz	4	178, 153
1909, E. F. Noroeste	5	218, 100
1910, conversion	4	442, 312
1911, port of Rio	4	238, 540
1911, Ceara Railway	4	102, 000
1911, Bahia Railway	4	108, 000
Total yearly carrying expense		3, 137, 467

As to the external debts of Brazilian States, they at present amount to £49,453,940 at the average rate of interest of 5 per cent. Adding to this interest 1 per cent more for the redemption of the principal, it will call for a yearly carrying expense of £2,697,000. The external debts of Brazilian municipalities amount to £12,683,650, these debts calling for a yearly carrying expense of about £800,000. The yearly amount due as dividends, interest, etc., on foreign capital invested in Brazil is estimated at £3,000,000. The shipments on account of foreigners residing in Brazil and of Brazilians traveling abroad (of the latter there are very few), amounted to about £500,000 a year.

The total of these items does not exceed £10,500,000, and therefore the balance of Brazil's international trade for 1914 (£11,843,000) was high enough to satisfy the necessities of the country as regards the amount of metallic money. This applies to the external liabilities of the country, because the internal necessities are being paid by nonconvertible paper money (forced course), which we will briefly analyze a little later.

The preceding study of the transitory financial instability at present felt in Brazil is another confirmation of the enormous influence exercised in the finances of a nation by the balance of her international trade.

The last 25 years, from 1890 to to-day, offer a brilliant illustration of such an influence. If we examine in the annexed chart the curve representing the

oscillations in the rate of exchange during this period and find the average (the exchange dropped from the high rate shown in 1890 to the minimum of 7$\frac{3}{16}$ during the whole year of 1898 and then rising gradually from 1899 on until it reaches the values of 15 and 16 pence in 1906 and 1910), such an average will be the rate of 12.5 pence per 1,000 reis. By marking in different colors the periods in which the exchange rate was about and below the average of 12.5, the figure will clearly show the phases of good and bad rates of exchange. (See p. 415.)

In the lower part of the chart another diagram is shown, which was obtained by marking, in an analogous manner, the yearly balances of exports over imports, in million pounds sterling, and by connecting by a continuous curve the variants obtained by these yearly balances, the resulting curve showing, therefore, the oscillations which the balance of international trade experienced in this period of 25 years.

Computing the average of such balances we find it to be £9,400,000; representing this average line in the diagram and marking with different colors the periods in which the balances of international trade were below or above such an average, we will analogously determine the phases of small or large international trade balances.

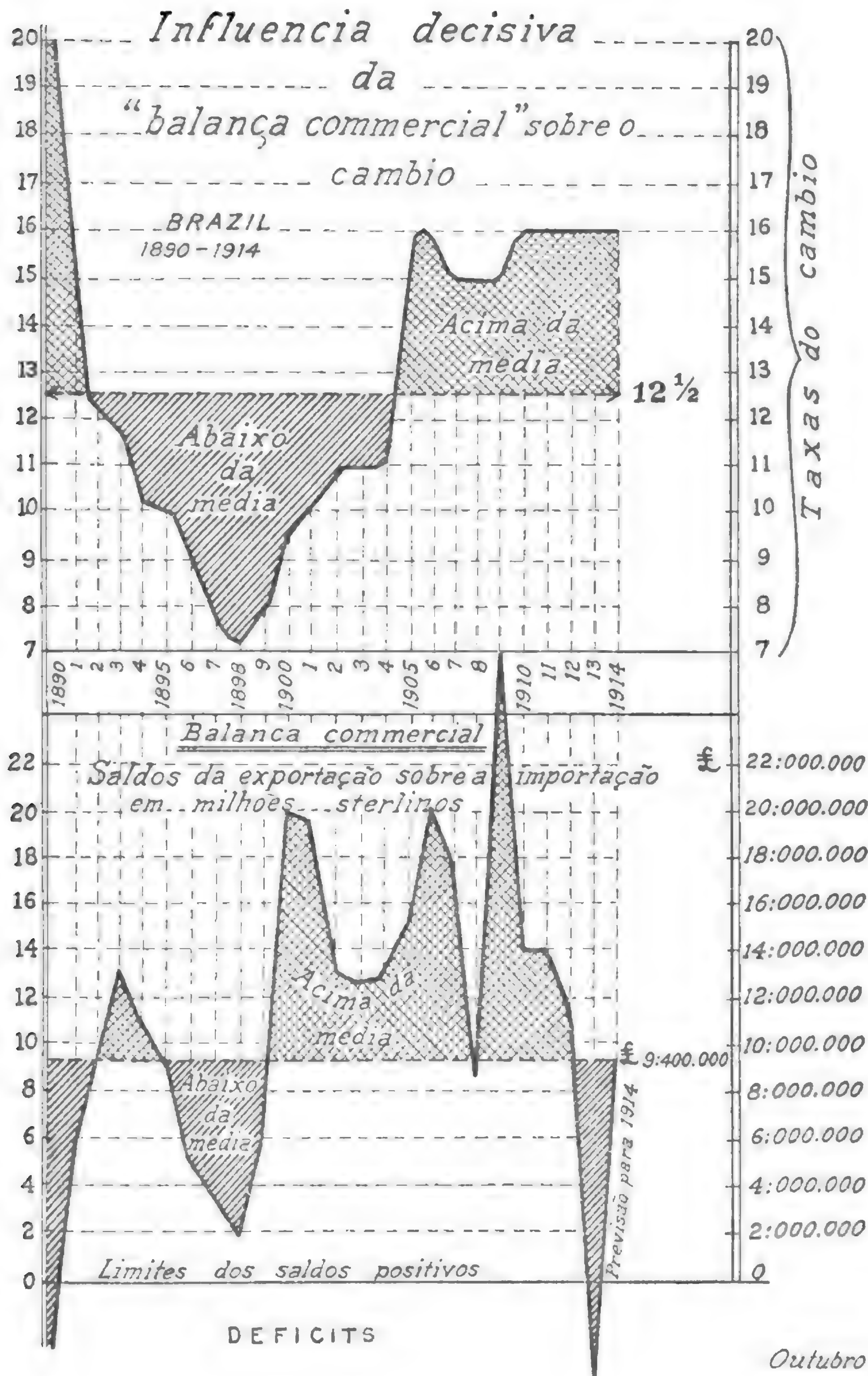
Finally comparing the two diagrams obtained as above described, we will be convinced that small balances of international trade are followed by low exchanges, or, inversely, high balances of international trade are determined by favorable exchanges, which in Brazil as well as anywhere else are bound together in an insoluble manner by the relation of cause and effect.

Lastly, we will study the internal financial situation of Brazil, where unhappily the symptoms indicate a state of grave instability, which has already been felt for about a year even in the rate of exchange.

The most striking phenomenon to one starting the study of this situation is the successive yearly deficits in the budget, which have been growing in huge proportion since 1908; and the scale of this unsteadiness of the expenditures of the country over its income may be seen in the following table:

	Deficit.
1908	£4,822,000
1909	4,142,000
1910	6,301,000
1911	8,909,000
1912	10,013,000
1913	9,300,000
1914	13,940,000

One of the determining causes of the present depressed state of the finances of Brazil lies in the ascending scale of deficits in the budget, forming an increasing arithmetical progression, the ratio of which—that is, the increase of the deficit of each year over that of the year before—is, on the average, £1,128,000. This ascending scale of deficits is due to two economic conditions: First, we have the feverish activity with which were realized several great accomplishments, none of them, however, of great value for the material development of the country; extensive railways for penetration, notable constructions at several maritime ports, etc., but whose postponement, at least of some of them, would have been of judicious prudence if, year by year, the results presented by the balance of international trade (the exclusive gauge of the amount of gold entering the country) had been consulted to better advantage. Second, we have the successive increase of the last eight years of the external Brazilian liabilities.


Influencia decisiva da "balança commercial" sobre o cambio
BRAZIL
1890 - 1914
Acima da media
Abaixo da media
12 ½
Taxas do cambio
1890 1 2 3 4 1895 6 7 1898 9 1900 1 2 3 4 1905 6 7 8 1910 11 12 13 1914
Balanca commercial
Saldos da exportação sobre a importação em milhoes sterlinos
£
22:000.000
20:000.000
18:000.000
16:000.000
14:000.000
12:000.000
10:000.000
£ 9:400.000
8:000.000
6:000.000
4:000.000
2:000.000
0
Acima da media
Abaixo da media
Previsão para 1914
Limites dos saldos positivos
DEFICITS
Outubro 1914

To obtain a clear impression of the above it suffices to analyze in the following table the decreasing steps in the balance of international trade, compared with the increasing progression of the external debts and with the ascending scale of the deficits between the income and the expenditures of the country:

Commercial interchange and finances of the union in the last three four-year terms of government.

Years.	Average value of pound sterling.	Exports.	Imports.	Balance or deficit.	Budget of Brazil.	
					Balance.	Deficit.
	Reis.					
1903	20,000	£37,131,000	£24,324,000	+£12,807,000	£5,141,000	....
1904	20,000	38,818,000	25,629,000	+ 13,189,000	2,556,000	....
1905	15,060	45,515,000	30,212,000	+ 15,303,000	....	£1,880,000
1906	15,000	53,311,000	33,286,000	+ 20,025,000	908,000	....
4 years	....	174,775,000	113,451,000	61,324,000	6,725,000	....

Average yearly balance of international trade (4 years, £61,324,000), £15,331,000.

External debt:

In 1903	£63,408,937
In 1906	74,008,937
Increase in 4 years	10,600,000

Years.	Average value of pound sterling.	Exports.	Imports.	Balance or deficit.	Budget of Brazil.	
					Balance.	Deficit.
	Reis.					
1907	15,737	£56,850,000	£38,836,000	+£18,014,000	£1,827,000	....
1908	15,835	44,571,000	35,824,000	+ 8,747,000	....	£4,822,000
1909	15,835	64,200,000	37,443,000	+ 26,757,000	....	4,142,000
1910	15,835	59,325,000	45,082,000	+ 14,243,000	....	6,301,000
4 years	....	224,946,000	157,185,000	67,761,000	....	13,438,000

Average yearly balance of international trade, £16,940,000.

External debt:

In 1906	£74,008,937
In 1910	97,608,937
Increase in 4 years	23,600,000

Years.	Average value of pound sterling.	Exports.	Imports.	Balance or deficit.	Budget of Brazil.	
					Balance.	Deficit.
	Reis.					
1911	14,869	£67,518,000	£53,381,000	+£14,137,000	....	£8,909,000
1912	14,840	75,455,000	64,110,000	+ 11,345,000	....	10,013,000
1913	14,840	65,548,000	67,890,000	− 2,342,000	....	9,300,000
1914	15,960	47,024,000	35,181,000	+ 11,843,000	....	13,940,000
4 years	....	255,545,000	220,562,000	34,983,000	....	42,162,000

Average yearly balance of international trade, £8,745,000.

External debt:

In 1910	£97,608,937
In 1914	103,773,180
Increase in 4 years	6,164,243

The survey of the preceding table confirms what we have said heretofore. One may see from it that the balance of international trade (whose fluctuations are independent of the Government because the commercial interchanges are

controlled by the producing classes), having increased by £6,437,000 from the first to the second four-year term studied (an increase of 10 per cent) then decreases suddenly from the second to the third four-year terms, dropping violently from £67,761,000 to £34,986,000; that is, £32,778,000, or 48 per cent, in only four years. This determined that instead of an annual entrance into the country of gold amounting to an average of £16,940,000 there entered only £8,745,000 annually. Such an amount is evidently insufficient to provide for the present gold necessity of the country, which, as shown in a previous paragraph, ranges from £10,000,000 to £11,000,000, and this only during the existence of the present moratorium.

The conclusion that we have just drawn explains the insistent sequence of the deficits in the budgets of Brazil during the last years. In fact, if the amount of metallic coin that the country imports annually is smaller than that which it exports, the natural solution is to take advantage of the internal credit while its elasticity permits by introducing successive issues of bonds into the national market until such internal issues are paid by means of a new external loan, thus securing a temporary relief for the national economy. Indeed, such has been the régime followed, the deficit in the budget for each preceding year has been consolidated with resources from the private capital in existence in the country.

But side by side with the cause that we are now analyzing—the depression of entrances of gold into the country—there is another still more alarming—the gradual increase during the last four-year governmental periods in the external liabilities of the country.

At the end of 1906 Brazil expended yearly £3,500,000 in order to carry its external debts. At the end of 1914, £5,500,000 were expended for the same purpose. This increase of £2,000,000, antagonistic to the retraction of the entrance of gold into the country, is one of the most powerful reasons for the present collapse in the exchange, which dropped from the normal rate of 16 to 12.25 pence per 1,000 reis gold, rising about 30 per cent by the resulting devalorization of the paper money in circulation in the country.

Let us emphasize at this point one of the most characteristic facts of the present financial condition of Brazil—a fact which has been repeated many times in the financial history of other countries:

Upon the declaration of the war in Europe the exchange dropped from the rate of 16 pence per 1,000 reis to that of 14—a violent effect of the immediate suspension in offers of gold drafts in payment for coffee, which crop was then in full phase of exportation. The Federal Congress of Brazil, then in session, voted, on August 15 of last year, law No. 2862, suspending the conversion of bills into gold by the "Caixa de Conversão," and shortly afterwards law No. 2863, of August 24, authorizing fiduciary issue of 250,000 contos. As a result of these measures, contrary to the prophecy of the obstinate adepts of the obsolete quantitative theory (currency principle), the rate of exchange rose in Brazil from 10 pence per 1,000 reis (minimum reached in that exchange collapse at the beginning of October) to 14¾ at the end of October; that is, the paper money, in spite of experiencing an increase in its volume of more than 40 per cent (250,000 contos over 600,000 then in existence), increased about 50 per cent in its value by the corresponding devalorization of gold, since the pound sterling from the value of 24,000 reis passed to be worth only 16,300 reis.

It would be impossible to obtain a more concise evidence than that with which this financial phenomenon came, adding one more proof to the absolute disconnection of the action of the two factors, "exchange" and "fiduciary money," in the finances of any country.

A deeper analysis of the situation reveals the logical reason for the transitory interruption of the gold market at that period: The offers of gold drafts for the purchase of coffee, the principal exportable product of the country, were suddenly discontinued, resulting in a suspension for a few days of shipments of the product already sold and ready for export. This cause, having been removed shortly afterwards, the economic situation became normal, and the rate of exchange rose in a few days. If, up to the present time, the exchange has not reached the standard rate of 16 pence per 1,000 reis (fixed by the "Caixa de Conversão"), the reason is the suspension of operation of said "Caixa de Conversão" by the Government on account of the lack of gold for the exchange of the convertible bills. The lack of gold is due to the insufficiency of the entrances of the metal into the country, which was caused by the violent reduction of 28 per cent on the price of coffee, the decisive supporter of Brazilian economy.

This will be a good opportunity to call the attention of those interested in these questions to the lack of proportion existing at the end of 1914 between Brazilian commercial interchange and the circulating medium, which is, evidently, the instrument for the interchange.

In 1912 the monetary circulation in the country was more than 1,000,000 contos, of which 610,000 was in paper money and 403,000 in money paper convertible into gold, and the exports of the country amounted to 1,120,000 contos. In 1914, in spite of the noticeable but transitory decline in price of exports, the total mass was only a little below the average of the preceding years, as previously shown. Interstate commerce was greatly increased as a result of the reduction of the international relations. In contrast with the above economic fact, there was a sudden removal from the monetary circulation of more than 400,000 contos, caused by the enormous withdrawals of gold from the "Caixa de Conversão," followed by the suspension of operation of said "Caixa de Conversão," reducing the circulating medium to the 600,000 of paper money. The lack of proportion was evident.

The convertible circulation, which was drained from the country, had to be replaced by some means. Otherwise the producing organism of the country would be deprived of one of its essential functions—the exchange of its products—due to the absence of the respective organ, the coin.

Lacking the good money, the metallic money of real value, which the fatality of the present occurrence on the planet will extrude from commerce, while it will be used in service of the war, only one thing could be done—to replace the circulatory function of the Brazilian production with a nonconvertible money.

Lively discussions in Congress, in several commercial assemblies throughout the country, and in the press, took place relative to a first fiduciary issue of 250,000 contos. In spite of the fact that the most judicious opinions favored the idea of raising the amount of the issue to the requirements of the circulation, the National Congress, however, authorized, in August, an issue of 250,000 in paper money. Very soon, however, those that believed this amount to be the quantum that the country needed were disillusioned and the law of the budget of the nation (law No. 2919 of Dec. 31, 1914) authorized the Government to issue paper notes, drawing interest payable by the national treasury. Finally, in August, 1915, by law No. 2986, the executive was authorized to issue bonds to replace the above referred paper notes and 350,000 contos more in bills of the treasury with forced course. The nonconvertible circulation authorized in the country rose thus, to 1,200,000 contos ($279,000,000 at present rate of exchange), small part of which relative to the issue of 1914 having already been cremated.

Finally, we will emphasize this point, that, in spite of the fiduciary circulation having been doubled, the rate of exchange shows strong tendencies to rise,

stimulated by the balance of international trade, which, in the nine first months of 1915 was greatly favorable to Brazil, rising to £13,719,000, while the balances of the same periods in 1911, 1912, 1913, and 1914 were, respectively, £4,807,000, £2,851,000, £9,270,000 (deficit), and £3,942,000.

Foreign commerce during the first nine months of the years 1911, 1912, 1913, 1914, and 1915 in £1,000 sterling.

	1911 [Balance, £4,807,000.]		1912 [Balance, £2,851,000.]		1913 Deficit, £9,270,000.]		1914 [Balance, £3,942,000.]		1915 [Balance, £13,719,000.]	
	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
January	4,149	4,673	5,798	5,204	7,829	6,236	6,114	4,781	4,802	1,685
February	4,134	4,335	5,520	4,404	5,561	5,354	5,155	3,844	4,041	1,812
March	4,480	4,602	5,765	5,324	4,403	6,187	4,607	3,732	5,380	2,493
April	4,139	4,067	4,403	4,701	3,515	5,850	4,126	3,927	4,394	2 616
May	4,510	4,711	4,103	5,072	3,276	5,540	3,775	3,887	3,053	2,751
June	3,735	3,916	4,914	4,821	3,002	5,805	3,749	3,406	2,438	2,565
July	4,616	3,977	5,563	5,600	3,482	6,112	3,266	3,220	2,183	2,718
August	6,028	4,287	4,970	5,286	5,239	5,309	1,380	2,308	4,129	2,610
September	7,740	4,156	7,424	5,197	6,180	5,364	2,499	1,624	4,221	2,672
Total	43,531	38,724	48,460	45,609	42,487	51,757	34,671	30,729	35,641	21,922

The preceding table is a convincing argument that the resources of the country, in the near future, will overcome the transitory depression now being suffered.

The present work could be brought to an ending at this point if not for the necessity of adding a few remarks regarding the natural and repeated confusion in the interpretation of the effects manifested in almost every country whenever, in her monetary circulation, fiduciary money is injected. The recent shocks suffered by the finances of nearly all Latin American Republics, following the European conflagration, will greatly assist the study of this subject.

During the first days that followed that catastrophe a rapid rise in the premium of gold was noticed, such rise having, however, no relation to the fiduciary money in circulation in those Republics. In Brazil the premium rose to 14 per cent; in Chile, to 25 per cent; in Colombia, to 11 per cent; in Peru, Equador, and Venezuela, to 11 per cent; in Guatemala it attained 67 per cent; in Costa Rica, 56 per cent; in Salvador, 43 per cent; in Honduras, 32 per cent; in Nicaragua, 23 per cent; and in Mexico, 81 per cent; while in Argentina and Uruguay the premium of gold was maintained almost stable. The above statistical data are a clear proof that it was not the countries of fiduciary money which suffered the most from the first effects of the retraction of the metal.

The reason for the above-mentioned effects is well known: Europe, with a third of the area and three times the population of the American Republics, buys annually from them more than $2,000,000,000, or about 60 per cent of the total American production. Thirty per cent of European merchant ships were suddenly removed from commerce; nearly one-third of the credits arranged in several American markets for the purchase of their products were canceled; gold was also suddenly deviated from the normal current of commerce, and many of the American Republics were forced to use as a temporary relief a moratorium.

Only few countries, those in which food products form the bulk of their exports, such as Argentina and Uruguay, were free from these depressive causes.

Such countries maintained their finances firm and did not need to use their credit with new issues of paper money.

Before closing we will call the attention of those interested to the results of fiduciary circulation in several countries which in abnormal situations had to take advantage of their credits, emphasizing at the same time the fact that no relation as yet may be found between fiduciary money in circulation and the fluctuations of value of the metallic money. Such a study should be of value for the purpose of drawing rational conclusions from occurrences in the past and will assist to rebuke the inconsistent and tiresome arguments of old theories.

The following diagrams clearly show the absolute lack of relation between the phenomena—" Premium of gold " and " Fiduciary circulation." This lack of relation is noticed, not only in the history of paper money in Brazil, but also in Russia, England, Italy, United States, Austria, Spain, Greece, and Chile during periods aggregating more than 240 years.

SUPPLEMENT.

Study of the fiduciary circulation in comparison with the fluctuations in the value of gold in several countries:

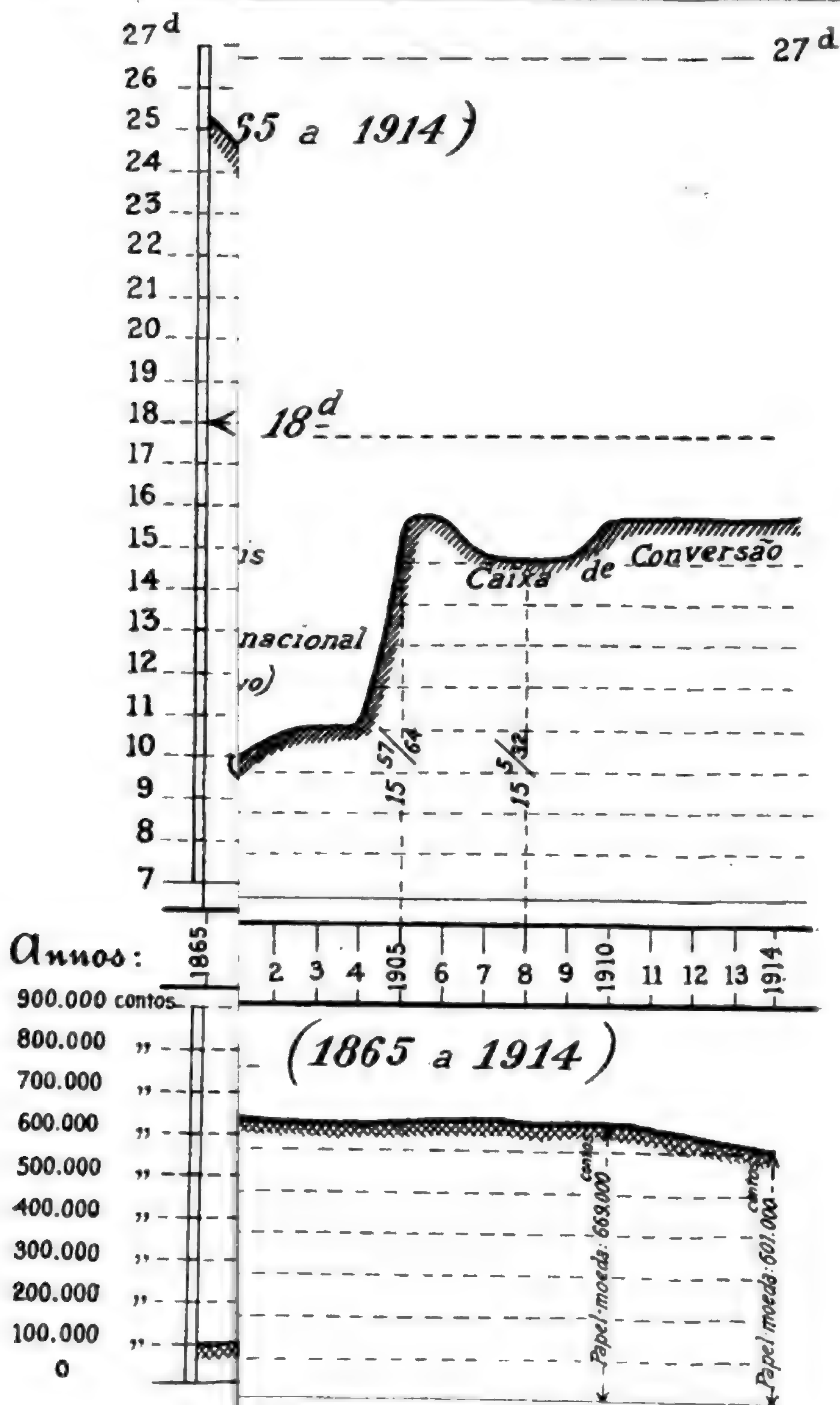
1. Brazil from 1865 to 1914.
2. Russia from 1800 to 1897.
3. England from 1800 to 1821.
4. Italy from 1866 to 1883.
5. United States from 1862 to 1879.
6. Austria from 1850 to 1876.
7. Chile from 1898 to 1914.
8. Spain from 1891 to 1910.
9. Greece from 1886 to 1908.

The first curve (chart No. 1) shows the oscillation of the exchange in Brazil during 50 years. For that period the average rate was 18 pence per 1,000 reis. The diagram shows that in 1889 and before the advent of the Republic (Nov. 15, 1889) the exchange attained the maximum rate of 27⅝ pence (paper money having a premium over gold of 2.2 per cent). The minimum exchange rate previous to 1889 is shown in 1868 (war with Paraguay), the rate being 17 pence per 1,000 reis, and gold having therefore a premium of 58 per cent over par.

During the 20-year period, from 1869 to 1889, the curve is very irregular, touching widely separated maximums and minimums and crossing the horizontal line in various steep slopes. Such a horizontal line would represent in a plot of this nature a line of financial stability.

If we compare this curve of exchange with that of fiduciary circulation, we will see that during the period 1869 to 1889 the curve of the fiduciary circulation is nearly uniformly horizontal in contrast with the marked irregularity of the other. The maximum amount of paper in circulation in that period, which occurred in 1880, was 215,677 contos, and the minimum, in 1874, was 183,094 contos, the total variation in the mass of paper between these extreme limits being 17 per cent.

The above comparison indicates that the two analyzed phenomena had no connection whatsoever.

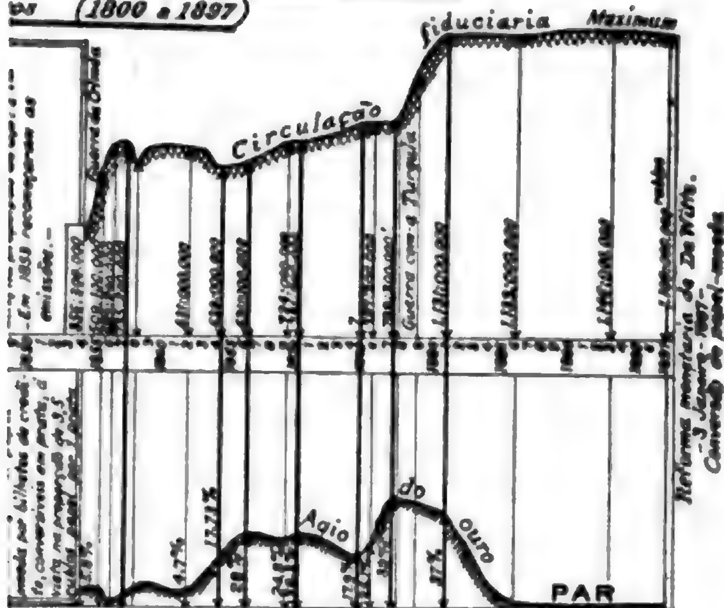


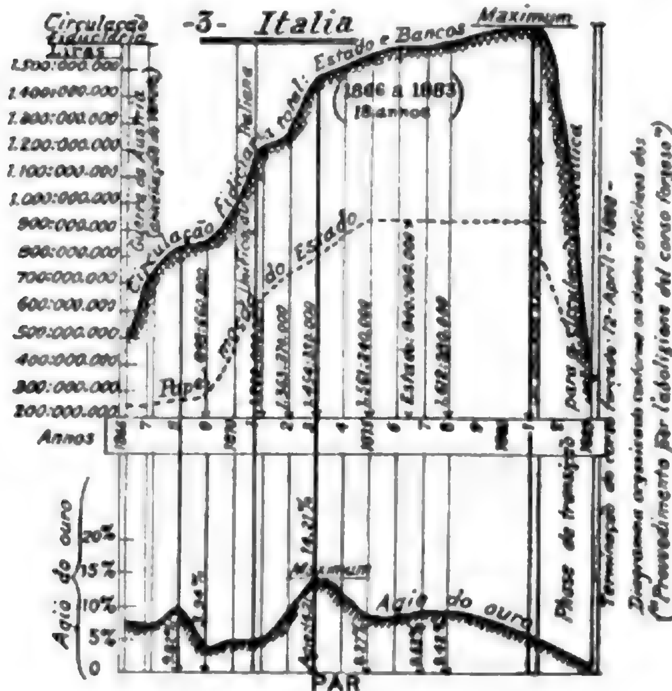
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fiduciary circulation."

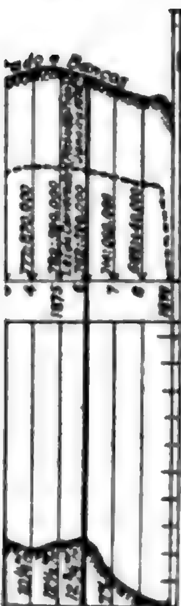
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From 1890 to 1914 (period of the Republic) there seems to be a coincidence in the two phenomena, the fiduciary circulation having risen in nine years (1889 to 1898) from 183,117 contos to 788,364 contos, an increase of 605,187 contos, or 330 per cent, while the exchange dropped from 27 pence to 5 pence; the premium of gold rising therefore from 0 to 440 per cent. If, however, we do not limit ourselves to a simple comparison of the two phenomena, rate of exchange and paper money, but investigate the causes, we will see the following:

1. In 1888 the abolition of slavery necessitated a reorganization of the labor system, causing a transitory decrease in the national production, which resulted in a decrease of the amount of gold entering the country.

2. A profound and radical political reform (proclamation of the Republic) caused a restraint in the shipment of gold from foreign countries until a reestablishment of credit occurred.

3. Public and private credit was greatly expanded, the public credit being due to an extraordinary increase in the expenditures and the private credit due to the organizations of numerous new enterprises, which resulted in the financial crisis of 1893 to 1898. This state of affairs was aggravated by successive issues of paper money by the Government and by the banks to replace the gold which was leaving the country.

We will conclude, therefore, that the superabundance of paper money was not the only factor in producing the phenomenon; but the economic and political factors above mentioned also assisted.

The four diagrams of chart No. 2 represent the fluctuation of metallic money in comparison with the circulation of paper money in the following countries:

(1) Russia from 1800 to 1897 (98 years); (2) England from 1800 to 1821 (22 years); (3) Italy from 1866 to 1883 (18 years); (4) United States from 1862 to 1879 (18 years).

1. In Russia the phenomenon had two entirely different aspects. From 1800 to 1843 the curves representing the fluctuation of the exchange and of fiduciary circulation look somewhat alike at first sight. From 1853 to 1897 they are entirely contradictory, showing that no relation existed between the two studied phenomena. Even in the first 43 years in spite of the apparent synthetic analogy of the two curves, it can be seen, that from 1817 to 1821, the amount of paper money being reduced from 836 to 595,000,000 rubles (26 per cent), the premium of silver remained stationary (74½ per cent); the exchange being uninfluenced by the withdrawal of 241,000,000 rubles from the fiduciary circulation in the short period of four years; and, still more, at the end of this first cycle (1843), the fiduciary circulation was raised to 595,776,300 rubles and the premium of metallic money dropped to 71½ per cent.

In the second studies period (1853 to 1897) the diagram shows:

(1) Up to 1857 the fiduciary circulation having been raised from 356,000,000 to 735,000,000 rubles (more than 106 per cent), the premium of gold was maintained at low rates (average of 4½ per cent).

(2) From 1857 to 1864 the fiduciary circulation was reduced from 735,000,000 to 639,000,000 (a reduction of 96,000,000, or 13 per cent), and the premium of gold, on the contrary, rose 14 per cent.

(3) From 1866 to 1870 the circulation was raised from 631,000,000 to 731,000,000 rubles (an increase of 90,000,000, or 14 per cent), the exchange being kept almost stationary, nevertheless.

(4) From 1867 to 1875, in spite of an increase of 76,000,000, or 10 per cent, in paper money, the premium of gold dropped more than 75 per cent.

(5) From 1875 to 1877 the fiduciary circulation was reduced 9,000,000; the premium of gold rose 116 per cent—from 18 to 39 per cent.

(6) From 1877 to 1881 the circulation rose from 788,000,000 to 1,131,000,000 rubles—an increase of 343,000,000, or 43 per cent, and yet the premium of gold dropped from 39 to 37 per cent.

(7) Finally, from 1881 to 1897, the diagram shows that the premium of gold dropped from 37 per cent nearly to par, the mass of paper in circulation being the greatest ever in existence, rising from 1,131,000,000 in 1881 to 1,133,000,000 in 1886 and to 1,146,000,000 in 1896.

The financial history of Russia in almost a century shows, therefore, an entire independence, and sometimes an almost complete antithesis of the two phenomena—the circulation of fiduciary money and the premium of metallic money.

2. In England an observation of the occurrence of 1800 to 1821 (22 years of forced course) points to an identical conclusion. The premium of gold was 14 per cent in 1801 against a circulation of £14,556,000,000 and dropped to 7.6 per cent in 1803, when the circulation rose to £15,983,000,000 (10 per cent more), after having passed the maximum of £17,097,000,000 in 1802. From 1803 to 1806 the paper money in circulation was increased from £15,983,000,000 to £21,027,000,000 (31 per cent more), and the exchange maintained stationary. From 1806 to 1808 £3,916,000,000, or 18 per cent of the total amount of paper in existence, were taken out of circulation and the exchange continued stationary, the premium being 7.6 per cent. From 1809 to 1810 an exceptional case occurred; the paper in circulation was increased from £19,574,000,000 to £24,793,000,000 (26 per cent more) and the premium of gold also rose 21 per cent. But in the following period (1811 to 1814), in spite of the circulation being maintained almost uniform (between £23,286,000,000 in 1811 and £23,368,000,000 in 1814), the rate of gold rose from 13 per cent to the maximum of 40 per cent, probably due to the grave economic perturbation which England suffered in consequence of the continental blockade in the Napoleonic wars.

Equally impressive is the analysis of the two phenomena in the period, 1814 to 1817, in which paper money was increased from £23,368,000,000 to £29,543,000,000 (26 per cent more), and the premium of gold on the contrary decreased from 40 per cent to 7.6 per cent, a decrease of more than 80 per cent.

Therefore, the financial history of England also confirms that the two functions now being studied were altogether independent, passing in many cases through entirely diverging values.

3. In Italy, also, as shown in diagram No. 3, exchange and paper money were almost never in accordance. The fiduciary circulation was raised from 496,000,000 of lire in 1866 to 841,000,000 in 1868—an increase of 70 per cent—and the premium of metallic money only varied 10 per cent. From 1868 to 1869 the fiduciary circulation rose again to 849,000,000 lire, and gold on the contrary experienced a depreciation of almost 6 per cent. Only in the period of 1871 to 1873, following the civil war from which the new Italy sprung up united, a transitory coincidence of the two phenomena may be seen: The circulation was increased to 1,454,000,000 lire, and the premium of gold rose 255 per cent. Soon afterwards, however, the two functions again diverged, as shown by the fact that from 1873 to 1881 the amount of paper money was increased to 1,660,000,000 (a 15 per cent increase) and the premium of gold dropped from 14½ per cent nearly to par, at which point it continued until the law of April 7, 1881, abolished the forced course, and the country returned to the use of metallic money.

The conclusion obtained from the study of the phenomena in Italy is that the currency principle, which establishes the relation of cause and effect between forced course and exchange, did not have the confirmation of the facts.

4. Finally, we come to the last diagram of this chart, relative to the United States of America. In 1866, at the end of the War of Secession, the premium of gold had attained the maximum of 44½ per cent, and from there on until the resumption act of January, 1875, gold dropped considerably in value in a constant march, while nonconvertible money was maintained between the limits of $687,500,000 (minimum, in 1868) and $787,590,000 (maximum, in 1875).

To recapitulate, a history of the paper money studied with reference to these four countries and embracing periods that aggregate a period of 156 years of fiduciary circulation demonstrates irrefutably the entire independence of the two phenomena represented in chart No. 2.

A study of this chart shows the comparison between paper money and exchange in the following countries: (5) Austria, from 1850 to 1876 (27 years); (6) Chile, from 1898 to 1914 (16 years); (7) Spain, from 1891 to 1910 (20 years); (8) Greece, from 1886 to 1908 (23 years). (See p. 424.)

5. A comparison of the paper money in circulation with the metallic money in Austria during 27 years of fiduciary circulation does not lead to convictions contrary to those that were deduced from the study of other countries. The premium of gold began to rise in 1850 from 19.87 per cent to 26 per cent, while the circulation was being reduced 18,000,000 krone. From 1851 to 1853 gold depreciated abruptly from 26 to 10.62 per cent, while the circulation was only reduced 12 per cent. From 1853 to 1854 the circulation was raised to 767,000,000, and in that year the premium of gold rose also to 27¾ per cent, the war of 1854 being one of the causes of that rise. From 1854 to 1858 the circulation was slightly altered—from 766,980,000 krone to 740,090,000 krone—and, nevertheless, gold dropped from 27¾ per cent to 4.12 per cent. In the three following years up to 1861 the premium of gold rose violently through the values 4.12 per cent, 20.62 per cent, 32.25 per cent, until the maximum of 41¼ per cent, and while the increase in circulation did not exceed 28 per cent. In the periods of 1861 to 1865 and 1865 to 1867 there was a similarity in the action of the two phenomena: Paper money decreased 25 per cent and the premium of gold almost 80 per cent; paper money decreased 25 per cent and the premium rose from 8.32 per cent to 24.31 per cent during the war between Austria, Prussia, and Italy. Up to 1873 the exchange dropped from 24.31 per cent to 8.14 per cent—a decrease of more than 16 per cent—while the fiduciary circulation was rising to the maximum of 1,405,740,000 krone—a rise of 18 per cent in flagrant contrast to the depreciation of gold.

In Austria, therefore, only by exception was there accordance between the two phenomena, and then only in abnormal periods.

6. In Chile a study of the two curves is still more impressive. In spite of the fact that the fiduciary circulation was being maintained at a constant level of 50,000,000 pesos from 1899 to the end of 1904, showing a noticeable financial stability during that seven-year period, gold oscillated most extravagantly, the diagram attaining violently a maximum of 46 per cent, dropping the following month to 25 per cent, rising again to 49 per cent in three months, and falling at last to 2½ per cent—minimum rate reached in December, 1900. Up to 1904, in spite of the fact that not one peso was added to the circulation, the premium rose from 2½ per cent in January, 1901, to 26 per cent in 1902, dropping afterwards to 7½ per cent and 10 per cent in 1903, then rising to 14 per cent, and finally dropping to 13¾ per cent in January, 1905.

The circulation was then increased to 80,000,000 pesos in the latter part of 1904, and this increase of 30,000,000, or 60 per cent, was made while the gold dropped from 13¾ to 9 per cent at the beginning of 1905, and this year closed with the premium of gold of 22 per cent.

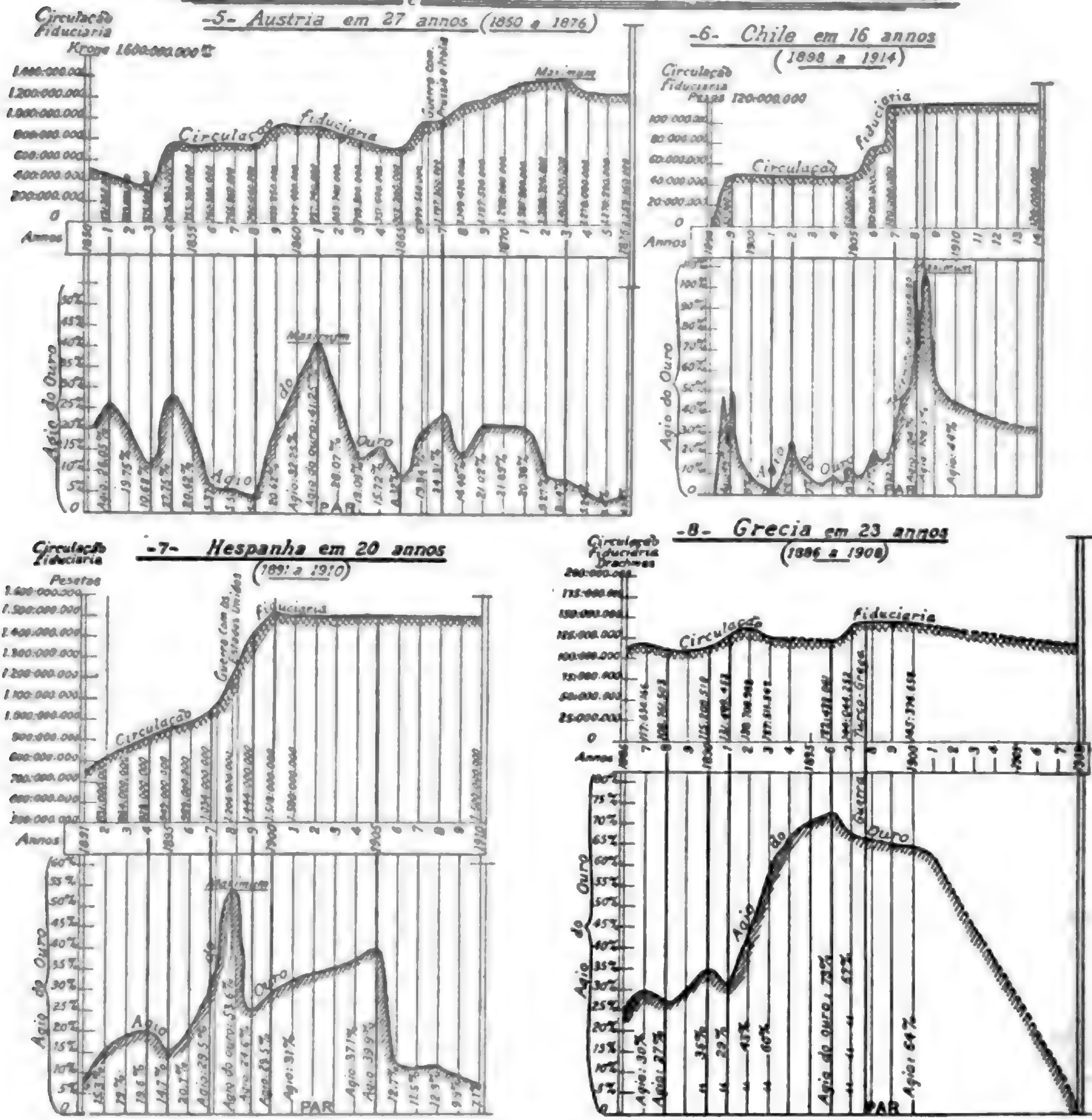


Chart No 3.—*Exchange and fiduciary circulation in several countries.*

A few issues of paper were authorized in 1906 to the value of 40,000,000 pesos, and the premium of gold, instead of rising, fell slowly to 17 per cent in August of the same year. As a result of the destruction of nearly all of the city and port of Valparaiso by the earthquake, the rate rose violently to the exceptional maximums of 104 per cent in the latter part of 1907 and 108½ per cent in April, 1908, dropping in the following years to an average of 38 per cent.

The results in Chile offer another proof of the independence of the two functions.

7. The diagrams relative to Spain for the years 1891 to 1910 show that:

(*a*) From 1891 to 1894, the circulation being increased from 747,000,000 to 928,000,000 pesetas (24 per cent), the premium of gold increased about 170 per cent; but—

(*b*) 1884 to 1895, while the circulation was increased from 928,000,000 to 949,000,000, the premium of gold suffered a drop of 25 per cent.

(*c*) From 1895 to 1897 the paper money rose to 1,034,000,000 pesetas and the premium of gold passed from 14.7 per cent to 29.5 per cent.

(*d*) In 1898, in consequence of the war with the United States, gold attained a maximum of 53.6 per cent, dropping immediately to 24.6 per cent, while the circulation was increased to 1,444,000,000 of pesetas, exceeding by 410,000,000, or 40 per cent, the amount in existence in 1897.

(*e*) In spite of the fact that the circulation remained stationary from 1903 on, the exchange fell to 7 per cent once more, showing the disaccordance between the two phenomena.

In conclusion, therefore, during the 20 years studied relative to Spain, the few analogies between the two phenomena are greatly outnumbered by the divergencies.

8. Finally, the study relative to Greece from 1886 to 1908 reveals that in the first period, 1886 to 1906, in spite of the fact that the circulation was being maintained at an average of 123,000,000 drachmas, from a maximum of 138,708,988 in 1892 and a minimum of 108,761,500 in 1888, the premium of gold rose in profound divergence from the minimum in 1886 to the maximum of 73 per cent in 1896 (an increase of 217 per cent); and that from there on, even if the circulation was increased from 122,000,000 to 145,000,000 drachmas (19 per cent), the premium of gold, divergingly, dropped in a noticeable way; and even in the years 1908, 1909, and 1913, the circulation being still more than 100,000,000, the premium of gold took on successive values of ½ per cent, 5 per cent, and 15 per cent.

The analysis of charts 2 and 3 clearly demonstrates the complete lack of analogy between the two phenomena, exchange and forced course, proving their independence of action.

LA HACIENDA PÚBLICA Y EL CRÉDITO DEL PERÚ.

Por ENRIQUE RAMÍREZ GASTÓN,

Miembro de la Sociedad Geográfica de Lima, Perú.

I.

Para juzgar con criterio económico el actual estado de la hacienda pública peruana, en relación con el crédito, menester es declarar que no se halla doctrinariamente establecida la primera, ni el segundo cuenta con factores de seguridad viables para operaciones de gran monto. Débese en parte a su accidentada política, así como a sus condiciones sociales y económicas, anteriores y presentes.

A propósito hay que recordar que, después de la guerra con Chile, el Perú perdió, con la usurpación de su provincia salitrera primero, y la cesión del guano y los ferrocarriles a sus acreedores después, lo principal de sus recursos.

Por haber sido éstos suficientes para atender estrechamente al presupuesto, descuidó en ese tiempo legislar sobre sólidos y duraderos principios y prácticas de creación de riqueza, esto es, sobre la participación de los asociados.

Verdad, que, ensayos hechos en este orden, tocaron siempre con dificultades provenientes de la extensión del territorio, como por la escasez de población, su

diversidad de condiciones y de razas; y la falta de elementos en la administración para dominar provechosamente el establecimiento de medidas conexas con tales servicios; pero tampoco debemos desconocer que aquellas iniciativas y ensayos fracasados, más han contribuido a desprestigiar el deber tributario, restándole importancia y derecho, que a conceptuarlas por sus aplicaciones y sus reglas.

Felizmente el Perú cuenta con variadas riquezas naturales explotables y aprovecha hoy la amarga experiencia del pasado para entrar de lleno y de acuerdo con industriales, en el afianzamiento de su hacienda, mediante la creación de impuestos, con los que, al par que la atención de servicios públicos, ha de conseguir desarrollar bienestar y riqueza pública y privada.

Es permitido suponerlo así, ya por la preparación de algunas de sus industrias como por las consideraciones y hechos que en seguida se exponen.

El vasto territorio de que dispone el Perú, está bañado por el Pacífico en una extensión de 2,000 millas; tiene al centro el más seguro y hermoso puerto del Occidente de la América del Sur, el Callao, a 1,300 de la boca del istmo y 765 del de su extremo norte.

Dividen el territorio tres zonas geográficas bien distintas; la Marítima o de Costa, la Central o de Sierra, y la oriental, de bosques y ríos navegables, llamada Montaña. Estas tres regiones tienen una superficie de 1,338,000 Km^2, después de la última delimitación con el Brasil y 3,500,000 habitantes, población estimativamente calculada, distribuida en este orden:

Costa, 180,000 Km^2, 900,000 habitantes—blancos y mezclados.

Sierra, 470,000 Km^2, 2,100,000 habitantes—indios.

Montaña, 688,000 Km^2, 500,000 habitantes—indios y mezclados.

Predominañ en la primera la agricultura, lah industrias, las sales, el carbón el petróleo, el guano (disponible solo para la agricultura nacional mientras la Peruvian Corporation termina próximamente la extracción de un saldo de 800,000 tons).

La segunda región del llama y la alpaca, es por excelencia minera e igualmente agrícola; y la última por sus gomas, maderas, plantas medicinales, tabaco, marfil, cacao, etc.

La exportación de productos en el penúltimo año, según la Estadística, da un valor de Lp. 9,000,000 del cual corresponden más ó menos:

A la Costa	Lp.	4, 000, 000			
A la Sierra (sólo minerales)	"	3, 800, 000			
A la Montaña	"	1, 200, 000			
Diez o doce años atrás, nuestros ingresos eran	Lp.	1, 400, 000	hoy	Lp.	2, 800, 000

después de haber llegado en 1914 a Lp. 3,500,000.

El monto del comercio internacional ascendía a	Lp.	7, 000, 000	hoy	Lp.	15, 000, 000
El capital de los Bancos era de	"	900, 000	"	"	1, 800, 000
Su caja	"	573, 000	"	"	2, 304, 000
Nuestros ferrocarriles tenían un recorrido	Km.	1, 590	"	Km.	3, 455
Nuestras principales exportaciones:					
En minerales	Lp.	871, 000	hoy	Lp.	3, 833, 000
En algodones	"	304, 000,	"		1, 565, 000
En azúcares	"	1, 008, 000,	"		1, 413, 000
En lanas y cueros	"	488, 000,	"		1, 718, 000
En gomas	"	670, 000,	"		1, 308, 000
En petróleo	"	17, 000,	"		910, 000
El pequeño comercio marítimo de cabotaje	"	3, 042, 000,	"		4, 587, 000

Como índices de movimiento y progreso estas cifras lo revelan. La evolución ascendente podrá ser diez veces mayor, sin exagerar, cuando sea un hecho la irrigación de la Costa, se hayan conectado unas con otras vías férreas y se lleve adelante la de Payta al Marañón. A propósito de irrigación puede citarse la estadística azucarera de 1914 en la que se lee que los fundos azucareros tienen una extensión de 204,515 hectáreas pero que sólo siembran 80,000 por carecer de agua para las demás.

II.

La hacienda pública del Perú, establecida bajo el régimen de la descentralización fiscal, se comparte, según ley del año 1886, entre el Gobierno, las Juntas Departamentales y las Municipalidades, subsidiariamente las Beneficencias, por correr a cargo de ellas la asistencia hospitalaria.

El Poder Legislativo vota anualmente el Presupuesto general, esto es, el fiscal y el de las Juntas Departamentales; y en la misma forma las Juntas aprueban los presupuestos municipales, como los Prefectos (1ª autoridad política departmental) los de las Beneficencias, exceptuándose los de la Municipalidad y Beneficencia de Lima cuya autorización da y corresponde por ley al Gobierno.

Las Juntas Departamentales y las Municipalidades disponen de ciertas contribuciones directas, aparte algo en rentas especiales; y atienden con ellas a la higiene, la sanidad, la construcción y conservación de vías terrestres, de sus respectivas jurisdicciones; quedando a cargo del Gobierno los servicios correspondientes a las necesidades del Estado; y a las Beneficencias la asistencia hospitalaria.

Según ley de Presupuesto, la liquidación definitiva del año financiero de cada institución se cierra el 30 de septiembre siguiente al año fenecido. Por esta razón y por haber descenso anormal en las rentas, e imprevisto aumento de la deuda flotante a consecuencia de la guerra europea, el movimiento financiero del año 1914, no revela la actual situación económica, siendo más útil, como información, referirse á las previsiones del legislador para 1915.

Va pues a ser revelada la hacienda pública, en cuanto a su renta y su gasto, con areeglo a los Presupuestos del presente año; y respecto de su crédito, con sujeción al Mensaje del Presidente de la República a las Cámaras en Julio próximo pasado.

El monto de la renta presupuesta para 1915 ascendió a la suma[1]		Lp. 3, 624, 415
Siendo:		
Fiscal	Lp. 2, 847, 275	
Departamental	224, 976	
Municipal	320, 000	
De beneficencias	232, 164	
El gasto se eleva a	3, 761, 209	
Correspondiendo al fiscal	2, 984, 069	
Y gasto igual a la renta en las otras instituciones	777, 140	
Resultando un déficit en el Presupuesto fiscal, igual a	136, 794	
Los créditos representan	7, 568, 956	
Lp. 6,611,869 del Tésoro público.		
De las Juntas Departamentales	75, 668	
De las Municipalidades (Lima y Callao)	835, 919	
De Beneficencias (Lima)	45, 500	

[1] Lp. 6 £e igual 10 soles de plata, cada uno de 24 peniques.

Los montos expresados los constituyen en el primer orden las siguientes rentas:

Contribuciones indirectas		Lp. 1, 633, 577
Aduanas	Lp. 757, 880	
Alcoholes	453, 200	
Mojonazgo	90, 000	
Correos y Telégrafos	124, 628	
Timbres y papel timbrado	75, 000	
Azúcar (consumo)	71, 233	
Fósforos	22, 686	
Derechos consulares	30, 000	
Varios	8, 950	
Contribuciones directas		633, 251
Predios	139, 652	
Industrial	93, 568	
Peruvian corporation	12, 000	
Alcabala	30, 000	
Registro de la propiedad inmueble	7, 500	
Policía, alumbrado	307, 011	
Liquidación de ejercicio anterior	34, 841	
Varios	8, 679	
Monopolios y explotaciones		901, 464
Estancos—		
Sal	262, 242	
Tabaco	523, 976	
Opio	14, 316	
Alcohol desnaturalizado	19, 500	
Establecimientos	47, 180	
Lotería de la Beneficencia	34, 250	
Dominios del Estado		307, 710
Guano (venta para la agricultura nacional)	63, 386	
Contribucion de minas	41, 348	
Inmuebles	187, 046	
Intereses de la Caja de Depósitos	6, 000	
Gomales y terrenos de Montaña	2, 000	
Muelles	3, 200	
Varios	4, 730	
Recursos especiales		148, 413
Total de rentas		3, 624, 415

Los gastos se dividen así:

Poder Legislativo	97, 942
Presidente de la República y su casa militar	9, 216
Personal administrativo	474, 810
Justicia y Policía	404, 793
Instrucción	371, 520
Culto	17, 366
Asistencia e higiene	364, 058
Correos y Telégrafos	105, 355
Obras públicas	138, 104
Defensa	674, 191
Pensiones	221, 609
Intereses y amortizaciones	420, 902

Los gastos se dividen así—Continúa.

Monopolios y explotaciones			Lp. 268,886
Otros gastos			192,457
Total de gastos			3,761,209
Asciende la deuda del Estado a			7,568,956

Por estos conceptos—Empréstitos colocados en Europa y en el país a saber.

Deuda pública			Lp. 2,153,096
Saldo del empréstito al Estado de Lp. 1,200,000 al 5 y ½%		Lp. 1,110,160	
Saldo de Lp. 200,000 empréstito de 1913 al Estado		85,320	
Saldo del 2° empréstito de 1914		196,666	
Empréstito a la Municipalidad de Lima 5%		600,000	
Saldo del empréstito de Lp. 80,000 a la Junta Departamental de Lima al 8%		60,950	
Empréstito a la Municipalidad del Callao		100,000	
Deuda flotante			4,880,886
Liquidación de ejercicios de presupuesto—			
El Estado		1,178,424	
Las Juntas departamentales		67,505	
La Beneficencia de Lima		626	
		1,246,555	
Vales del Tesoro		139,456	
a los Bancos—			
El Tesoro préstamo autorizado por ley	Lp. 1,117,319		
La Municipalidad de Lima	16,086		
		1,133,405	
A la Compañía Recaudadora de Impuestos—			
Empréstito al 7%	1,245,000		
Giros sobre productos	245,788		
Por transferencias de tabacos	113,346		
Municipalidad de Lima	40,214		
		1,644,348	
El Estado a diversos acreedores		672,250	
La Beneficencia de Lima		44,872	
Deuda consolidada			534,974
Vales de consolidación de responsabilidad del Tesoro de 1% de interés Lp. 2,660,645 nominales cotizados a 14½%		385,793	
Títulos amortizables sin interés Lp. 711,715 nominales cotizados a 10%		71,171	
Censos, capellanías, sus intereses y créditos diversos reconocidos Lp. 511,757 nominales cotizados a 10%		51,176	
De la Municipalidad de Lima:			
Créditos del ramo de propios		17,224	
Créditos de la Institución Concha		9,610	

El Congreso autorizó a los Bancos en septiembre de 1914 para emitir en cheques circulares Lp. 2,500,000, creando al mismo tiempo una Junta de Vigilancia de la emisión.

Los Bancos garantizan la parte que cada uno tome de la emisión entregando a la Junta:

(*a*) 20% en oro amonedado.

(*b*) 30% en cédulas hipotecarias por su valor nominal; bonos hipotecarios en el 75% de su valor; inmuebles de los Bancos situados en la República por el 75% de su valor; créditos hipotecarios a favor de los Bancos que no excedan del 50% del bien hipotecado; los Warrants expedidos por los almacenes fiscales; y el resto en valores comerciales cotizables y documentos de cartera aceptados por la Junta de Vigilancia con un margen de 30% de su valor.

Entre los valores comerciales y documentos de cartera no se incluyen las obligaciones fiscales, solamente, sí el préstamo que de la emisión hacen al Gobierno los Bancos (Lp. 500,000) con castigo de 30% de su valor.

La situación de los cinco bancos establecidos en la República, la Caja de Ahorros y la Caja de Depósitos y Consignaciones que tomaron parte en la emisión era, en 30 de junio de 1915 la siguiente:

ACTIVO.

Caja y oro depositados	Lp.	2, 304, 066
Cartera y cuentas corrientes deudoras		7, 986, 001
Muebles e inmuebles		233, 891
Varios incluso cobranzas		1, 711, 012
		12, 234, 970

PASIVO.

Capital y reservas	Lp. 1, 833, 546		
Cheques circulares emitidos	2, 322, 335		
Cuentas acreedoras, depósitos y aceptaciones	5, 226, 880		
Varios incluso cobranzas	2, 852, 209		
		Lp.	12, 234, 970

III.

No hay inventarios de bienes, ni datos o registros que consultar para conocer lo que la nación posée.

Exceptuando los ferrocarriles, el muelle dársena y las compañías nacionales de recaudación de impuestos, la salinera y la peruana de vapores, lo demás no se conoce, o se conoce vagamente, por lo que se limita la presente exposición a un simple enunciado de estos y a detallar solamente lo pertinente de los primeros.

Ferrocarriles.—El trazo general según el Ministerio de Fomento es de 7,369 kilómetros de los que 3,023 kilómetros están en explotación; 232 kilómetros en construcción; 3,384 kilómetros estudiados; 740 kilómetros en proyecto.

Una compañía inglesa denominada "The Peruvian Corporation," usufructúa 1,710 kilómetros. Esta sociedad adquirió el derecho de explotar los ferrocarriles del Estado por contratos cuyo origen es el siguiente:

Allá por los años de 1869, 1870 y 1872 el Perú contrató, respectivamente, un empréstito en esos años para construir ferrocarriles entre Pisco e Ica, Lima y Oroya, Mollendo y Arequipa dando como garantía los guanos del Pacífico y los nitratos de Tarapacá, por el monto de aquellos empréstitos ascendentes á Lp. 33,000,000 nominales.

Sobreviene en 1879 la guerra, provocada por Chile a Bolivia en la que el Perú toma parte como aliada de ésta, y, victorioso Chile, aduéñase de Tarapacá, centro de los nitratos, negándose a reconocer a los acreedores del Perú el perfecto derecho de dejar afectas a la responsabilidad las salitreras. Como los tenedores de bonos se negaron, a su vez, a gestionar la garantía debida, el Perú, desangrado, desposeído, arruinado, hubo de resignarse a un mayor sacrificio y tratar con sus acreedores la cancelación de su deuda externa.

Fué en 11 de enero de 1890, cuando los arreglos quedaron terminados por escritura pública y el Perú libre de su deuda externa bajo estas principales condiciones: (memoria del Ministerio de Hacienda 1890).

Cancelación por la Peruvian (entonces tenedores de bonos) de las deudas de 1869, 1870 y 1872 a cambio de entrega de los ferrocarriles por 66 años (1,254 Km.—10 líneas).

Cesión gratuíta de todas las obras construídas y los terrenos fiscales disponibles y necesarios para el uso de las líneas, con evicción y saneamiento de parte del Gobierno.

Uso gratuíto de los muelles y liberación de derechos aduaneros para su material importado y su carbón.

Explotación por su propia cuenta de las líneas telegráficas que existan y deban existir en las vías entregadas, lo mismo que por el teléfono.

Cesión de los derechos del Gobierno, bajo responsabilidad de los Tenedores, contra constructores y poseedores presentes y pasados de los ferrocarriles.

Propiedad de las naves del Gobierno que navegan en el Lago Titicaca; derecho de tráfico libre y concesión del agua de Arequipa a Mollendo para las necesidades de la línea.

Cesión gratuíta de 3,000,000 de toneladas inglesas del guano existente en el territorio, rebajadas á 2,000,000 si no se concluye la línea de Sicuaní al Cuzco.

Mientras los Tenedores no hayan extraído la cantidad estipulada, el Gobierno, no podrá vender, exportar ni permitir esto á nadie, solo tomar el necesario para la agricultura nacional.

Cesión del guano a que el Gobierno del Perú tenga derecho sobre lo negociado por Chile durante la explotación por este.

Pago del Perú a los Tenedores de 33 anualidades de Lp. 80,000 cada una.

Autorización para que los Tenedores levanten uno o más empréstitos hasta Lp. 6,000,000 con garantía del guano y los ferrocarriles, para prolongar los ferrocarriles, construír nuevas líneas, etc.

Exención del pago de timbres.

Por consecuencia del traspaso de los derechos del Perú al guano vendido por Chile, los Tenedores percibieron de esta República en total Lp. 1,047,709.818 (Memoria citada).

Irregularidades de una y otra parte en el curso de dicho contrato, dieron lugar a otro de transacción, modificatorio, en parte, del anterior. En este, celebrado el 20 de Junio de 1907 se establece:

Dejar sin lugar todas y cualquiera falta, reclamación, etc. por una y otra parte.

Prorrogar por 17 años, después de los 66 pactados, la duración del contrato que terminará en 1973.

La Peruvian (organizada por los Tenedores en Mayo de 1890) se compromete a construír 300 kilómetros de ferrocarril en lugar de los 160 que debió construír y no construyó.

La Peruvian pagará al Estado los gastos bechos en las construcciones de Oroya a Huari, Sicuaní a Checacupe, Huari a Huancayo, Cheçacupi al Cuzco.

El Estado pagará a la Peruvian durante 30 años a partir de 1907 una anualidad de Lp. 80,000 en mensualidades de Lp. 6,666 del impuesto al azúcar.

La Peruvian pagará en cuotas trimestrales por contribuciones: 12,000 Lp. de 1907 a 1917; 15,000 de 1917 a 1927; 20,000 de 1927 a 1937.

Durante la prórroga de 17 años, el Perú percibirá 50% de los productos netos de los ferrocarriles y vapores del Lago Titicaca y de las prolongaciones que construyese.

Muelle y dársena.—Propiedad hoy de una Sociedad francesa; se invirtió según informes 60,000,000 de francos. La duración de este contrato fué por 60 años, de los cuales 25 de derecho con exclusiva vencidos en 1912 y el resto de simple explotación que vencerán en 1937 pasando entonces a ser propiedad del Estado.

Explotaciones y monopolios.—El capital en tabacos representa, Lp. 70,766; el de compra en opio, 2,087; las inversiones en el estanco del alcohol desnaturalizado, 5,264; las mismas en la sal, 52,000.

Compañía peruana de vapores.—Posee el Gobierno en esta compañía en acciones, Lp. 96,000; pero la subvenciona por ley con una anualidad de Lp. 52,000.

Irrigación del Valle de Chira (Piura).—Garantiza el Estado a esta Compañía el 5% de interés anual y amortización proporcional del capital en 90 años no pasando de Lp. 11,000 al año.

La compañía al liquidar sus utilidades reembolsará al Estado las sumas que haya pagado el año anterior por intereses y amortizaciones.

Líneas telegráficas y telefónicas.—La red telegráfica alcanza una extensión de 12,635 kilómetros, perteneciendo a la Peruvian 2,219 kilómetros.

Las líneas telefónicas de particulares miden 13,684 kilómetros, las del Gobierno 296 kilómetros.

Muelles fiscales.—Con excepción de los de Eten y Tambo de Mora, los existentes de propiedad del Estado están en arrendamiento simple y producen Lp. 3,200, se ignora su costo.

Posee el Estado entre otros muchos inmuebles los dos locales de las Cámaras, el Palacio de Gobierno, el de Justicia, el de la Exposición, el local de los Ministerios de Fomento y de Relaciones Exteriores, la Penitenciaría y Cárceles de hombres y mujeres, varios cuarteles, los locales universitarios, la Casa de Correos y Telégrafos, los locales donde funcionan las Escuelas de Ingenieros, de Agricultura, de Artes y Oficios, la Aduana, los almacenes fiscales y depósitos del trigo y de explosivos, el de la Biblioteca y la Sociedad Geográfica, la hacienda de Santa Beatriz, la Casa de Moneda, el Instituto Nacional de Vacuna, el laboratorio, la Escuela Correccional y el de Medicina.

IV.

Tributación y Moneda.

MONEDA.

La de curso legal y valor cancelatorio es la (Lp.) libra peruana oro igual en peso y ley a la £e. y representa el valor de diez soles de plata, cada uno de 24 peniques.

La moneda de plata es el sol de 100 centavos, el 1/2 y el 1/5 de sol, el 1/10 dinero y 1/2 dinero, todas las piezas de 9/10 fino con tolerancia de 3 milésimos en la ley.

La moneda de cobre es de 2 y 1 centavos correspondiendo el valor al de la materia y precio de fabricación.

IMPUESTOS FISCALES.

De Aduanas.—El gravamen según la tarifa de importación y exportación es por derechos específicos.

El tipo gravado es la unidad decimal. Aproximadamente se puede tener idea del gravamen específico por las tasas de la tarifa anterior que han servido de base a la actual para fijar sobre la nueva el derecho específico a cada mercadería.

Las tasas impuestas por la anterior tabla eran:

Vinos y licores, 65% del valor de factura en Aduana.

Muebles y artículos costurados, 45% del valor de factura en Aduana.

Telas de toda clase, 40% del valor de factura en Aduana.

Artículos no concluídos, 20% del valor de factura en Aduana.

Herramientas, 10% del valor de factura en Aduana.

Joyería y piedras finas, 3% del valor de factura en Aduana.

Los demás y no mencionados, 40% del valor de factura en Aduana.

Sobretasa, 10% en el Callao, 2% en Payta, Salaverry, Pisco y Eten.

En exportación:

Toda goma por Iquitos 8%.

Madre de Dios y afluentes, 2% valiendo de 25 a 36 peniques, 4% de 37 a 48, 6% de 49 adelante.

Oro en pasta y en polvo 3% sobre el valor.

Por ley reciente a consecuencia de la guerra y mientras dure los productos de la agricultura a saber:[1]

Azúcar y demás productos de la caña 6 peniques por qq de 100 lb^s^ españolas cuando el precio del azúcar de 96% de polarización se cotice desde 11/6 chelines en el puerto de embarque.

Algodón por qq español peso bruto a bordo en el puerto de embarque:

El áspero de Piura.—A partir de 7 1/2 peniques por libra, 7 1/2 peniques por qq de 100 lb^s^ españolas. Por cada medio penique de mayor precio, en libra, se aumentará el impuesto en 2 1/2 peniques por qq.

El semi-áspero y metafifi.—Valiendo 7 peniques por libra, se cobrará 5 peniques por qq, elevándose 2 1/2 peniques por qq por cada 1/2 penique de aumento en la cotización.

El algodón suave.—A partir de 5 1/2 á 6/8 peniques por libra, 6 peniques por qq de 100 lb^s^ españolas. Subiendo el precio desde 7 3/4 peniques por libra, dos chelines.

Para los algodones pardo y amarillo, manchados, se adoptará el tipo de cotización en Liverpool.

Lanas.—Lavada de 1A. de Arequipa, 2 chelines por qq español de 100 libras peso bruto a partir de la cotización en Liverpool de 11 peniques.

Cueros.—De res, fresco 3/4 penique el kilo.

Son libres de derechos los productos del Brasil por el Amazonas exceptuado el Yavarí; los que importen el Cuerpo Diplomático, instituciones públicas de culto y beneficencia, bomberos, sociedades de tiro y máquinas para industrias, útiles, etc.

Se prohibe importar conservas alimenticias con ácido bórico; pólvora, armas, municiones sin licencia del Gobierno, opio, sal y tabacos estancados.

Para el desembarque, almacenaje en Aduanas de depósito, (Callao, Payta, Mollendo e Iquitos) y despacho de la mercadería en aduana, se paga el servicio causado según tarifas en cada uno. El papel para aduanas es de 20 y 40 ct^s^ la foja y los timbres conforme a la escala indicada en el aparte—timbres—.

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[1] Exceptuados de impuestos los que se exporten por Iquitos y Madre de Dios.

En los apartes Naves, Derechos Consulares, Faros y Capitanías se trata de lo concerniente a los gravámenes respectivos relacionados con el comercio y el tráfico marítimo; y en el denominado *Marina Mercante* las franquicias que se conceden a la Marina Nacional.

Naves.—Veáse además Derechos Consulares, Faro, Capitanías, Registro Mercantil y franquicias a la Marina Nacional Mercante.

Manifiestos por mayor no siendo de itinerario S/. 5 c/. ejemplar.

Manifiestos de itinerario S/. 2.

Manifiestos de buques de lastre de más de 10 T. S/. 1.

40 Ct^{s}. por tonelada de registro semestralmente a los buques que entran al Callao como derechos de hospital para la Beneficencia del lugar.

Derechos Consulares (en soles de 48 peniques).—Certificación de facturas consulares 1 % sobre el monto declarado.[1]

Despachos de naves, 2 ct^{s}. el 1er. puerto de un país, los demás del mismo u otra nación 1 ct^{s}. por tonelada de registro.

Intervención en préstamos o venta de mercaderías, 1/2 % hasta S/. 4,000, pasando de esta suma 1/4 %.

Certificación de sobordos, despachos 2 y 1 centavos.

Patente de sanidad 2 centavos por tonelada de registro.

Por otros actos, derechos varios, desde 50 ct^{s}. hasta S/.5 según ellos.

Faro.—Vapores de itinerario 1/2 centavo por tonelada de registro.

Buques y vapores a su arribo 2 ct^{s}. por tonelada de registro. En uno y otro caso, donde hay faro.

Capitanías.—Por *licencia de salida* de naves se paga según tonelaje y puertos, S/. 4–2 y 1; por derechos de rol—por el rol. S/. 1–0.75 y 0.50; derechos de venta de embarcaciones, S/. 5; depósitos de patente, S/. 4; derechos de matrícula, S/. 6–3 y 1; derechos por certificados del Capitán del puerto, S/. 4; derechos por matrícula personal cada seis meses, S/. 0.50; el dique flotante paga al semestre, Lp. 4; por las embarcaciones que reciba de hasta 350 toneladas.

De timbres.—Son fijos y volantes de uno y cinco soles y de dos, diez y veinticinco centavos.

Se pone timbre en manifiestos de buques y pólizas de Aduana, (V—Impuestos á las naves) y en todo documento privado en este orden:

En los cheques bancarios—2 centavos.—En cada hoja de los libros a que se refiere el artículo 33 del Código de Comercio 2 centavos.

Cédulas hipotecarias—20 centavos cada 10 Lp.

En los documentos privados papel de timbre fijo hasta de 2 Lp. el de 2 centavos; de más de 2 á 50 Lp. el de 10 centavos; de más de 50 á 100 Lp. el de 25 centavos.

Excediendo de 100 Lp., timbre volante de 10 ct^{s}. por fracción que no exceda de Lp. 50 y de 25 ct^{s}. por cada 100 Lp. o fracción mayor de 50 Lp.

En pólizas de seguro contra incendio.—10 ct^{s}. de 2 a 10 Lp.; 25 ct^{s}. de mas de 10 Lp. hasta 50 Lp.; 50 ct^{s}. de más de 50 Lp. hasta 100 Lp.; S/. 1.00 ct^{s}. por mayores de 100 y proporcionalmente a la escala anterior las fracciones.

En pólizas de Aduana.—De trasbordo y reembarque 25 ct^{s}.; de despacho y de explotación 10 ct^{s}.

Papel sellado.—Para los usos que determina la ley se emplean los siguientes sellos: 1° de S/. 0.05 foja; 2° de S/. 0.10 foja; 3° de S/. 0.20 foja; 4° de S/. 0.50 foja; 5° de S/. 1.00 foja; 6° de S/. 3.00 foja; 7° de oficio gratis.

Papel de multas.—Para penar las infracciones reglamentarias de los servicios institucionales, se expiden las multas en papel especial de los siguientes sellos,

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[1] Los derechos consulares en el Ecuador, Chile y Colombia se pagan en soles de 24 peniques.

pagando al fisco la institución que lo usa en esta forma: Sello 1° de 0.10 foja—costo 0.01; sello 2° de 0.20 foja—costo 0.02; sello 3° de 0.50 foja—costo 0.03; sello 4° de 1.00 foja—costo 0.04; sello 5° de 5.00 foja—costo 0.05; sello 6° de 10.00 foja—costo 0.10.

Registro mercantil.—Se grava la inscripción de un comerciante por una sola vez con la ½ parte de lo que semestralmente abona por contribución industrial o de patente.

Las inscripciones de títulos, capitulaciones matrimonales y patentes de invento S/. 5 y 1 o 2 soles según por sociedades, naves, constancia de depósitos, dotes, poderes y toda otra inscripción. Si la inscripción se registra además en el Registro de propiedad se cobra la mitad de estos derechos.

Registro de la propiedad inmueble.—2% de la renta vitalicia, dote sobre inmueble procedente de extraño a la dotada; ½% la dote sobre bienes muebles, ventas, donación o traspaso de capitales y el capital para constituir sociedades; ¼% de dote en dinero, mutuo, deuda, sociedades anónimas, adelantos, censos, capellanías, transferencias de dominio.

Marcas de fábrica y privilegios.—Marca nacional, S/. 12.50; marca extranjera, S/. 50.00; privilegios, S/. 50.00; si el descubrimiento es nacional paga además a cada perito nombrado, S/. 25.00; y si es extranjero, S/. 50.00.

Guano para la agricultura nacional.—Tres soles por unidad de nitrógeno.

Contribución sobre la renta.—Se cobra el 5%[1] sobre el 80% de la renta=sea el 4% sobre el total que producen capitales a mutuo, valores en obligaciones de instituciones y empresas, letras hipotecarias y documentos semejantes.

Contribución de minas.—Se cobra S/. 15 al semestre por cada pertenencia de extensión máxima de superficie de 40,000 metros cuadrados. En el presente año vence la exoneración de impuestos por 25 años de que gozaba la minería Actualmente se discute establecer un módico impuesto.

Los yacimientos de nitratos y sales son propiedad del Estado según ley del 8 de enero de 1904; queda con esta ley modificada la de 22 de diciembre de 1888.

Contribución industrial y de patentes.—Es el 5%[2] sobre la utilidad de una profesión o industria que exceda de S/. 200 al año, se paga por semestres.

El producto de esta contribución por Lima y Callao es de rentas generales, lo demás pertenece a las Juntas Departamentales.

Correos.—Cartas pasando el istmo c/. 15 gramos, 12 ctˢ; no pasándolo 10 ctˢ; periódicos pasando el istmo c/. 50 gramos, 4 ctˢ; no pasándolo 3 ctˢ; muestras peso máximo 350 gramos, por c/. 50 gramos 6 ctˢ.

Certificación y aviso recepción 10 ctˢ la pieza.

Periódicos para Bolivia, vía Mollendo, gratis.

Cartas para los países sudamericanos, los primeros 20 gramos, 6 ctˢ, los demás 4 ctˢ.

Diarios y publicaciones c/. 100 gramos 1 centavo.

Encomiendas, E. E. U. U., los 460 gramos 50 ctˢ; Bolivia por 500 gramos 40 c/.; 500 excedentes 20 ctˢ—Otros países hasta 5 kilos mínimo S/. 1.10 máximo S/. 5.60.

Telégrafos.—Hasta 10 palabras 40 ctˢ, cada palabra más 4 ctˢ

A la Montaña hasta 10 palabras 80 ctˢ, cada palabra más 6 ctˢ

Servicio radiográfico.—De los buques a Lima y Callao 1 a 10 palabras 50 ctˢ, cada una más 5 ctˢ más la tarifa telegráfica. En otro idioma que el español el doble.

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[1] Durante el año 1915 se aumentó el tipo a 6%.

[2] Durante al año 1915 las patentes de Lima y el Callao se gravan con el 7% en lugar de 5%.

De los mismos a las estaciones inalámbricas: En español a la Montaña 1 a 10 palabras S/. 2.40, cada palabra excedente 24 centavos. En otro idioma el doble, más la tarifa telegráfica en ambos casos.

Sistema Telefunken.—1 a 10 palabras S/. 1.75, cada una más 18 centavos.

Sistema Marconi.—Cada palabra 17 centavos.

IMPUESTOS AL CONSUMO.

Alcoholes.—Producción nacional. Alcohol de uva litro 100° Gay Lussac S/. 0.27 costa; alcohol absoluto litro 100° Gay Lussac costa S/. 0.50, S/. 0.40 sierra. Proporcionalmente los de menor graduación.

Vino natural 1 ct[s] litro; vineta 5 ct[s] litro; cerveza 2 ct[s] litro.

Producción extranjera.—Cerveza, litro, 8 ct[s]; bebidas alcohólicas de cualquier graduación litro, 86 ct[s]; vinos tintos y blancos superiores, litro, 50 ct[s]; vinos tintos y blancos inferiores, litro, 40 ct[s]; asti y espumosos, litro, 80 ct[s].

Azúcar:		Costa.	Sierra o Montaña.
Azúcar blanca de primer caldo	K	0.04	0.03
Azúcar moscabada, concreto	K	0.02	0.01½
Chancaca	K	0.01	0.00¾

Fósforos.—60 fósforos de palo en caja 1 centavo; 60 fósforos de cera 2 centavos; 20 fósforos de papel o cartón 1 centavo; pagable en timbres.

ESTANCOS.

Alcohol desnaturalizado.—El precio de este artículo es variable.

Tabaco.—Son igualmente variados los precios de la materia prima y manufacturada; habiéndose recargado en el presente año con 20% sobre los precios anteriores a febrero de 1915.

Sal.—Se grava con 5 centavos el kilo más el flete; y 3 ct[s] kilo-sal para industrias.

Opio.—Precio variable.

RENTAS DEPARTAMENTALES.

Alcabala de sucesiones.—2% sobre traslación de dominio, compra venta, enajenaciones, permuta, donación y 4% según grado de parentesco por herencias.

CONTRIBUCIONES.

Industrial y de patentes.—(Véase este impuesto entre los fiscales.)

Eclesiástica.—3ª parte de la renta de un año y a los párrocos propietarios la 12ª.

Rústica y urbana.—Igual a la de patentes.

RENTAS MUNICIPALES.

El producto del mojonazgo o sea la internación del de alcoholes, bebidas alcohólicas, minerales, gaseosas, nacionales o extranjeras, tabaco, café, coca azúcar, naipes en un máximun de la mitad del impuesto fiscal.

Disfrutan también de impuestos especiales por concesiones del Congreso, cuando éstos se han de aplicar a una obra pública; igualmente, de rentas por servicios locales, según tarifas o padroncillos.

Con excepción de la sobretasa en Aduanas, no hay otra en ninguna institución del país.

Leyes de protección especial sobre Marina Mercante.—Las naves nacionales que trafican en el litoral están exoneradas de toda gabela ó derecho,[1] excepto el de hospital.

Las patentes y su arqueo se expiden gratuitamente.

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[1] Ley aclaratoria de 21 de noviembre de 1905, no exime el pago de derechos de matrícula.

Los pasavantes de las de menos de 50 toneladas gratis.

Están obligados sí, a tener un quinto de tripulantes nacidos en el Perú, computándose para este efecto el capitán igual a cinco hombres, el piloto o maquinista por dos y el grumete por un marinero; llevando además un aprendiz en su cámara para practicar el pilotaje. Estas obligaciones se imponen para gozar de las franquicias.

Las naves a vapor con bandera nacional (excluída la Compañía Nacional por la subvención de que goza) recibirán un centavo por tonelada de registro y cada 100 millas recorridas en viaje redondo, siempre que el andar mínimo sea de 10 millas por hora.

Sobre terrenos de montaña.—Ley 31 de diciembre de 1909.

La ley respeta las legítimas posesiones en poder de particulares. Las demás se declaran de dominio del Estado y pueden ser adquiridas por particulares en esta forma: por venta, por dominio por adjudicación gratuita y por concesión. La adquisición comprende los vegetales que contengan.

En venta se cobra S 1 por hectárea, no más de 1,000 de terreno de cultivo, ni de 30,000 de gomales, salvo autorización legislativa.

Por denuncio se pueden adjudicar hasta 50,000 hectáreas, pagando el concesionario una contribución semestral de 5 centavos por hectárea.

Por adjudicación gratuita se dan 5 hectáreas por persona con la obligación de que cultive en el plazo de tres años.

Por concesión para obras públicas o colonización S 1 por hectárea.

Hay cesión de compensación de vías férreas, o caminos carreteros o de herradura.

Se permite reconocer y explorar por un año mediante el pago de un derecho de 10 centavos por hectárea.

Las adquisiciones sea cualquiera su forma no comprenden las vías y caídas de aguas, las minas y pajonales, ni 50 metros a la margen de los ríos, ni las servidumbres de uso público.

Sobre aguas.—La ley establece que son del Estado las que se hallan fuera del dominio de tierras de particulares. La adjudicación de las del Estado, para fuerza, para irrigaciones y otras empresas. El Estado interviene en la tarifa de los servicios de las empresas, prestando según ellas protección con garantías o prestaciones de otro género.

La irrigación de Chira (Piura) por ejemplo tiene 5% de interés anual y amortización proporcional en 90 años del capital que se invierte, no pasando en ningún caso de £p. 11,000 al año.

Esta empresa proporciona el agua a los hacendados mediante el pago de S 15 por litro de agua permanente por segundo y por hectárea de terreno.

Los principios que rigen la tributación en el Perú son liberales y solamente proteccionistas en Aduanas.

Toda industria nacional es así protegida y ejercida sin restricción ni vigilancia sobre la garantía debida al consumidor.

La tasa mayor del impuesto es 5% sobre la utilidad y sobre la renta, excepcionalmente por consecuencia de la guerra se ha elevado en 1915 al 7%.

SUJETOS ECONÓMICOS NO GRAVADOS.

Explotaciones mineras, fabricación industrial, el trabajo y la renta del trabajo, las importaciones para usos industriales, el tráfico (excepción de un derecho recientemente establecido para los pasajes por mar al exterior), la propiedad privada no explotada o fabricada, el uso de las aguas, la pesca, los montes, los espectáculos públicos, la lotería.

Y con excepción de una sobretasa de 8% a la importación, ninguna contribución o impuesto sufre tampoco recargos.

ORGANIZACIÓN DEL COMERCIO EXTERIOR EN EUROPA, CON DESTINO AL URUGUAY ESPECIALMENTE DE ARTÍCULOS MANUFACTURADOS.

Por OCTAVIO MORATÓ J. WEST.

COMISIONISTAS EN EUROPA.

Con casa abierta en los principales centros comerciales: Londres, Paris, Berlin, Génova, etc. Poseen relaciones con las fábricas de su país y con las de los otros. Se encargan de llenar los pedidos que les hacen las casas de comercio de Montevideo con quienes mantienen relaciones y de enviar las mercaderías hasta el puerto de Montevideo, corriendo con todos los trámites y gastos del envío.

COMISIONISTAS EN MONTEVIDEO.

Con relaciones en Europa: con fábricas o con comisionistas de Europa a los cuales representan en Montevideo. Toman los pedidos por cuenta de ellos y los envían para su cumplimiento a la fábrica o al comisionista respectivo. Los envíos de mercadería se hacen por la fábrica o por el comisionista de Europa: (*a*) Directamente a la casa compradora; (*b*) indirectamente, por medio del comisionista, quien despacha la mercadería y la entrega a su destinatario.

FÁBRICAS EN EUROPA.

Hacen directamente los envíos de mercadería pedida a las casas compradoras, con las cuales ya han establecido sus relaciones.

COMPRADORES EN EUROPA.

Las casas importadoras envían directamente sus compradores a Europa para hacer allí sus compras casi todos los años o todos los años. Las compras se efectúan:

a) Por medio de comisionistas establecidos en Europa, que les exhiben muestras o a quienes el comprador refiere sus pedidos en las fábricas que recorre.—El comisionista se encarga de la remisión y pago de la mercadería.—El comprador conviene con el comisionista independientemente las condiciones de pago de las mercaderías que ha comprado.

(*b*) *directamente a las fábricas o comisionistas vendedores*, según la índole de los artículos quienes se encargan de expedir directamente las mercaderías en las condiciones pactadas.

SISTEMA DE VENTAS.

El comisionista o la fábrica de Europa, establece directamente sus relaciones con el comercio de Montevideo:

(*a*) por *agentes viajeros* que visitan la plaza de Montevideo, con sus muestrarios y catálogos; se informan de la responsabilidad del cliente y le venden sobre muestrario o catálogo o sobre modelos que le suministra el comprador;

(*b*) a solicitud *de la casa compradora* por correspondencia o por agente de la casa compradora; el vendedor se informa por medio de los Bancos de Montevideo o sucursal de los Bancos de su nacionalidad en Europa: inglés, francés, alemán, italiano, etc.

PLAZOS DE LAS VENTAS Y FORMAS DE PAGO.

La mercadería es enviada al comerciante de Montevideo, por lo regular, puesta en el puerto de desembarco. La factura incluye el pedido, precio convenido por la mercadería, gastos de embalaje, si corresponde, flete y seguro.

COMERCIANTES DE PEQUEÑA RESPONSABILIDAD.

Se les entrega el conocimiento de la mercadería contra pago al contado. Es operación que se realiza por lo general por intermedio de un Banco o del comisionista representante del vendedor en Montevideo.

COMERCIANTES DE CIERTA RESPONSABILIDAD.

Se le envía directamente la mercadería;

(a) contra aceptación de una letra desde 30 hasta 180 días de vista, enviada a un banco o comisionista representante en Montevideo y la cual acompaña el conocimiento respectivo que se entrega al destinatario al ser aceptada la letra—o bien se envía independientemente.

COMERCIANTES DE RECONOCIDA RESPONSABILIDAD.

Las mercaderías se envían directamente a la casa compradora con las facturas y conocimientos correspondientes:

(a) Con la condición de girar su importe dentro de un plazo determinado de 30 a 180 días de la recepción de la factura o se su fecha según se convenga.

(b) El importe de las facturas se carga en una cuenta corriente dentro de límites establecidos o no, que devenga interés y cuyos saldos serán cubiertos cada seis meses o en la forma que se establezca o bien cubierta a comodidad del comprador, ya sea o no sujeta a límites de descubierto, según la liberalidad del vendedor la importancia del comprador y la actividad de los negocios.

Nota.—La generalidad de las casas importadoras de Montevideo operan en la última forma, de cuenta corriente y directamente con las fábricas o con los comisionistas establecidos en Europa. Muchas casas importadoras de Montevideo tienen establecidas, principalmente en Paris sus casas de compras particulares, que operan en la misma forma que los comisionistas allí establecidos.

CRÉDITOS QUE UTILIZAN LOS COMISIONISTAS O LAS FÁBRICAS EN EUROPA PARA ATENDER NECESIDADES DE SU EXPORTACIÓN.

(a) Créditos en los bancos europeos en la forma corriente en que ellos acostumbran concederlos.

(b) Créditos sobre letras giradas por la fábrica o el comisionista europeo contra los compradores de Montevideo.

El vendedor entrega a un banco de Paris, por ejemplo, o el comisionista, letras para ser cobradas en Montevideo por expedición de mercaderías. Sobre el valor de estas letras el banco hace adelantos de dinero en determinada proporción, envía las letras y los documentos respectivos a su destino, por intermedio de su corresponsal, y acredita el importe en cuenta a medida que las cobranzas se verifican.

DISPONIBILIDADES DE LOS BANCOS DE MONTEVIDEO EN EUROPA.

(a) *Agencias o sucursales de bancos europeos en Montevideo.*—Operan libremente sobre fondos depositados allí o sobre descubiertos, pues se trata de operaciones realizadas sobre la misma institución.

(b) *Bancos locales de Montevideo.*—Sobre fondos depositados previamente en poder del corresponsal en Europa; sobre créditos abiertos.

1. *Crédito de caja.*—Por el cual disponen de verdaderos descubiertos; sin garantía; con garantía de valores mobiliarios.

Este crédito es cubierto por primer correo a salir; o a un mes de plazo, o a otros plazos convenidos.

2. *Crédito de aceptación de letras a 90 días vista.*—Los bancos en Europa aceptan letras giradas por los bancos de Montevideo a 90 días vista hasta un límite determinado. Este crédito es sin garantía o con garantía, según los casos y se cubren:

(a) Antes del vencimiento de las letras aceptadas;

(b) Utilizando del crédito de caja que le hubiera sido concedido.

GENERAL SESSION OF SECTION IX.

NEW WILLARD HOTEL,
Wednesday morning, January 5, 1916.

Chairman, JOHN BATES CLARK.

The meeting was called to order at 9.30 o'clock by the chairman.

The CHAIRMAN. We shall listen first to a paper by Mr. Thomas H. Wheless, of Newark, N. J., on the subject of "Motor-driven vehicles and motor railroad cars as a factor in transportation."

MOTOR-DRIVEN VEHICLES AND MOTOR RAILROAD CARS AS A FACTOR IN TRANSPORTATION.

By THOMAS H. WHELESS,
President of the American International Railway Corporation.

Man, in the effort to extend his radius of travel and promote commerce, has experimented through the entire gamut of animal force, and the progress of tribes and nations has borne a direct relation to the improvement in means of transportation. The substitution of mechanical for animal force as the means of transportation retains this principle of change, notwithstanding the wonders it has wrought in nationalizing the cooperative instinct and broadening men's ideals; and radical improvements in type of mechanical power and in service methods are being instituted to supply conveniences undreamed of heretofore. It was only in 1814 that George Stephenson's locomotive, "Blucher," demonstrated its practicability, and in 1829 that the first passenger railway in the United States was built between Camden and Amboy in New Jersey, with its then most "up-to-date" locomotive weighing but 11 tons.

Between that time and the present great advancement has been made in railway building and equipment. There are now 387,208 miles of operated railroad (all) tracks in the United States, 254,555 miles of which represent a total length of roadway owned or operated by 2,105 roads, with a combined capital of $20,247,301,257, or some $64,000 per mile of operated lines; and locomotives are being built that weigh 426 tons, capable of hauling a train 1.6 miles in length, composed of 250 loaded cars weighing over 17,900 tons, up a grade of 0.1 per cent, combined with 5° curve. Cars of 100 tons capacity are in general use, but it is doubtful if they have yet attained the load capacity that will adequately meet the requirements of through freight traffic.

The present operated railway mileage of the United States represents an average of 8.48 miles per 100 square miles of territory, but this ratio varies

very widely, being, for instance, 30.78 miles in the State of New Jersey and but 1.87 miles in Wyoming. It is well known that New Jersey still needs additional railways, even equal to its present mileage, and the marked disparity in the ratio of mileage to territory in the different sections of the country is evidence of the need of more railways in sparse territory. While railway mileage has kept pace with the growth of population, railway service has not kept pace with traffic needs. Through traffic facilities for dense territory are efficiently provided for, but railroads of the future in new territory must be built with the special view of handling local traffic and producing business for existing lines.

The need of transportation in the vast open areas of South America is much greater than that of the United States, because that continent has but 49,938 miles of railroad to serve its 7,640,228 square miles of territory, or about one-tenth of the proportionate mileage of the United States. If the combined countries of South America possessed only 2.22 miles of railway per 100 square miles of territory, a ratio equaling the average combined mileage ratio of Arizona, Nevada, New Mexico, Utah, and Wyoming—States having the least railway facilities—it would represent 167,555 miles, less than half the railway mileage of the United States. Nevertheless, the outlook is hopeless unless a low cost type of railway is found that can be operated at a profit upon the limited traffic that is characteristic of all new territory. Building the mileage indicated with the average capital employed for steam railroads would represent an investment of nearly $11,000,000,000, and the burden of interest would soon bankrupt all lines so built, and they would be lost to the original owners through foreclosure.

As the weight of locomotives is being enormously increased to haul a greater number of cars of increased load capacity, the possibility of obtaining transportation to meet the limited traffic needs of new territory is becoming more remote, because heavy equipment can not handle light traffic economically or at the frequent service intervals that the public convenience demands. It moreover necessitates an expenditure that is disproportionate to the revenue from traffic in average territory. The prevailing types of steam railroad equipment necessitates a yard and siding mileage that equals 31 per cent of the total railway main-line mileage in the United States, including single, second, third, and fourth tracks, and which requires an upkeep expenditure of about $200,000,000 annually.

The steam railroads are laboring under the impediment of inflexible mechanical and operating methods and of more cars than should be used for the tonnage hauled, and their great problem is to correct the waste that is occasioned by maintaining the surplus. There are 2,354,796 freight cars in service of 39.12 tons average load capacity, equal to 9.4 cars per mile of operated lines, and costing $237,741,385 annually to maintain. The average annual mileage per car is 8,789 miles, or 24 miles per day, hauled both loaded and empty. This analysis shows that standard freight cars are unsuited for the service of feeder lines or to handle local traffic in new territory. Their mobility and quality of service is in marked contrast to the scientific types of sturdy, handsome motor cars that can sustain an average speed of 70 miles an hour for 1,000 miles. Even the average mileage of motor trucks operating upon public highways exceeds by a third that of standard freight cars. The total freight locomotive mileage, apportioned to those operating only on the main line, indicates an average daily mileage for each locomotive of only 49.1 miles, which is about double the daily average freight-car movement. When these facts are considered in conjunction with the large investment represented the operating waste

is shown to have an important bearing upon the matter of dividend and also of solvency.

The problem of the steam railroads is to keep their cars moving with full loads, because the principal waste in car operation results from hauling equipment weight which is in excess of that required for actual loads. Notwithstanding this, over 28 per cent of the freight cars of several leading roads in the southern and western districts are employed in hauling average loads of but 4¼ tons. This situation is not new. A record of 20 years shows that there has been no progress in freight-car operating economy, for at present only 4.6 of their capacity is utilized with a resulting waste of many millions of dollars. This is not in the slightest degree attributable to mismanagement, but is due solely to mechanical causes that are inherent in a type of equipment that requires radical modification in order to adapt it to changed social and traffic necessities. If standard freight cars could be released from package freight and general local service, their availability for through traffic would meet the requirements of every section of the country, facilitate redistribution, and effect a substantial operating economy.

The railroads must either find traffic to employ their present cars with appropriate loads, or have two types of equipment to accommodate the two kinds of traffic in both freight and passenger business. The importance of correcting this condition will be better understood when it is realized that operating expense is 72.30 per cent of the operating revenue, and that the maintenance of equipment absorbs 24.126 per cent, and interest on debt 14.5 per cent, or 38.628 per cent of their total revenues; and that these items do not include 4 per cent that should be charged off for annual depreciation, or the fact that 95 per cent of 15,800 miles of railroads in western territory are staggering under operating expenses that equal 79.6 per cent of operating revenue. The above facts clearly indicate the inadaptation of steam railroad equipment for light loads and service on feeder lines, and partly accounts for the insolvency of 41,000 miles of steam railroads which are being operated under receivership in this country; and likewise for the practical suspension of railway building, the new mileage for 1915 being less than half of that of any year during half a century. If the railroads had a way to increase their merchandise traffic, full carloads would result and operating waste would be transformed into a substantial profit. It is therefore evident that the matter of increased traffic is of greater importance to them than change of equipment.

The belief of certain students of transportation that a remedy will be found in increased traffic accruing from an extension of the system of improved public roads is illusory. Public highways will continue to be laid out for the benefit of the public and not to benefit the traffic of railroads at the expense of the taxpayer; and will also inevitably parallel their lines in order to connect the business centers already established by the railroads, and these routes will be overrun by road pirates who will harass the railroads' local traffic, unless the latter provide transit and delivery facilities equal to those offered on the public roads. Standard equipment can not be used for the frequent service trips that will be required to meet this competition.

With the average apportionment of railway mileage to territory and the natural resources of given territory as guides, it is evident that the only solution of the traffic problem in new territory is the building of low cost feeder lines that can operate more frequent service trips with reduced loads than are practicable for steam railroad equipment. These will increase traffic and stimulate industry that will produce more traffic. Feeder lines should be extended

from both sides of the main line to a distance, say, of 10 miles, or less, into outlying districts; and it would be fortunate for the public and the railroads alike if they could be built at every 10 or 15 miles.

There also exists a serious waste in passenger car operation. The average passenger train comprises 5.6 cars and the average number of passengers carried per train is 56, or 10 passengers per car. Assuming 40 tons as the average weight of a passenger car, the weight of a train would be 224 tons, to which should be added 80 tons, weight of locomotive—a total of 304 tons operated to carry passengers weighing approximately 4 tons. The operating of this unneeded weight of equipment for the service indicated constitutes a charge of over 20 per cent against passenger revenue, besides involving waste of invested capital and producing unjustifiable depreciation of track.

It will thus be seen that the chief obstacle in the way of satisfactory earnings from freight and passenger traffic as well as to a service that is acceptable to the public is an unelastic type of equipment that is unsuited for carrying the light loads that constitute so large a percentage of total car movement. The time of the car is the railroads' most important asset and if unutilized becomes a source of waste mounting up into millions of dollars annually. It may be truly said that to idle cars is attributable the affliction of short term notes and cumulative refunding indebtedness which sap the income of all steam railroads.

The above facts are sufficient to show the unsuitability of steam railroad equipment to the light traffic of ordinary feeder lines and indicate the need of lighter and less expensive types of tracks and motor cars which will meet modern service requirements, and the operating expense of which will be well within the revenue to be derived from traffic in undeveloped territory.

It is not recommended that the steam railroads should abandon any part of their present equipment on their main lines, even to effect a saving in handling less-than-carload merchandise, because the loss of investment would be too great and also because a change in policy with respect to building numerous low price feeder lines for developing territory might result in its profitable operation and require its retention. In some cases it is probable that an amount equal to the cost and maintenance of standard equipment could be profitably used to build new types to gradually replace the old, and thus provide equipment interchangeable with that of motor-car railways, so as to use the latter's facilities upon certain parts of their own lines, and reserve the replaced cars for interline traffic. A type of equipment that would tend to separate business into logical classes, enabling each to be enlarged independently of the other, would be beneficial to both the roads and the public.

It is possible that the operating or motor-car units on steam-road main line might cause schedule complications without otherwise justifying their substitution for existing equipment. But their economic value, as well as the great convenience of motor cars of moderate capacity for service on feeder lines and for railway extensions in new territory, can not be doubted. Feeder lines should be predicated upon the same economic principle as the installation of irrigating systems; their construction should anticipate agricultural and other industrial development. But they should be operated with motor cars of appropriate weight and design for transporting loads not exceeding the average less-than-carload merchandise loads of the steam railroads. Such units operated at short intervals could without difficulty handle the average traffic of steam branch railroads and of their average territory at a construction and operating cost that would be proportionate to the traffic. And by bringing a succession of loads to standard freight cars at junction or other

transfer points, full carloads would be quickly obtained without any greater delay or risk of deterioration of perishable merchandise or other exigent matter than if carried by express or by the mails. The result would be the stimulating of business throughout the territory served and the building up of local traffic in which the railroads experience their principal operating waste. The above solution would benefit the public as much as the railroads and would tend to a settlement of the acrimonious contentions over rates and service, because the railroads could with reason demand a satisfactory rate for improved service.

Cost is the chief factor in obtaining capital, and the above plan contemplates the transfer of loads at junction points in territory where the building of feeder lines only at the lowest possible cost is justified and where such lines would be efficient substitutes for public roads over which the railroads could not exercise control. With increased traffic, however, and need for heavier loads the original track could be replaced by heavier construction and could be used in extensions; in which case equipment could be installed that would be interchangeable with that of the main line. This is the only system of railways that has a chance to pay operating expenses and fixed charges in new territory and build extensions with a surplus earned in the territory they traverse.

Notwithstanding the urgent need of transportation in new territory, the steam railroads can not supply it. The principal reason, therefore, for building motor-car railways is the universal need of new communities for a system of permanent transportation that will provide a service at low cost and frequent intervals.

There are a number of European and American makes of railroad motor cars that are serviceable, but they have not been designed with regard to the moderate load requirements of feeder lines and new territory. A motor-car railway system has already been perfected which will supply in all particulars the needs of new communities and overcome the deficiencies of steam or electric railways for feeder-line service. It also overcomes the objection to motor truck or jitney service and is an excellent type of track for city streets. Railway motor cars with self-contained power, or tractors, with load capacity ranging from one-half ton to 5 tons, can operate either singly or in multiple over the typical distances of steam railroads with a facility equal to that of steam locomotives, and over grades that would be insurmountable to the equipment of steam railroads. Unlike the steam locomotive with fixed weight on the driving wheels, railway motor cars provided with adequate reserve tractive force may increase the factor of adhesion and, correspondingly, the tractive effort by taking on more revenue load. Motor-car railway tractors resemble sturdy automobiles, their construction and mechanism are simple and they can be safely operated by chauffeurs of ordinary experience and intelligence.

About 7 per cent of home-owned freight cars and 15 per cent of locomotives are always in the shops. Repairs of motor-car railway equipment could usually be made promptly on the line at small expense. Four per cent would be a reasonable yearly allowance for tractor depreciation, and the depreciation of track would be but a fraction of that of steam railroad track. Steam railroads can not economically operate the proper number of cars to take care of the daily variations of traffic (minimum) which occur in all new territory, but motor-car railways can, and with their introduction the prevailing uneven distribution of both passenger and package freight, mail, express, etc., on the trains is a situation that would be fully remedied.

There is a good margin between express charges and rates that could be profitable to motor-car railways on nearly all business, if loads can be figured out both ways and they can provide a better service at lower rates than are at present paid in sparse territory. Stations at distances of one-fourth mile, or less, along motor-car railways may be served without inconveniencing line service.

While no comprehensive authoritative data have as yet been collected regarding the cost of transportation of various loads by various types of motor-car railway tractors or cars with self-contained power, nevertheless there is sufficient authentic record of the operating cost of motor busses and trucks on public highways and of types of motor cars approximating standard passenger equipment on steam railroads to justify the assertion that motor-car railways equipped with units of operation of 14 to 32 passengers, or 5 tons maximum capacity, and possessing the faculty of operating in multiple units on feeder and branch lines, could economically transport the average local passenger, freight, and other traffic of the steam railroads of the country and give a highly satisfactory service. Motor-car railways are susceptible of greater elaboration in design and simplification in construction than steam railroads to meet the variety of service that is required by local physical and traffic conditions.

As in the early days of irrigation, "the work of bringing water through a ditch to the dry land, giving fertility and wealth, was not understood," so at the present time the possibilities of motor-car railways as builders of commercial empire in the vast open areas of Pan America and for conserving the hundreds of millions of dollars in value of agricultural products that annually decay in the fields for lack of transportation are not fully appreciated.

The most satisfactory operating economies in new territory will be attained by reducing, not enlarging, the capacity of operating units and by using petroleum or its refined products as fuel. The weight of coal and the space necessary for it would accommodate a revenue load sufficient to pay operating expense and a profit besides. The motor-railroad car is the embodiment of simplicity. In the future its efficiency will be greatly increased and its cost lowered. The steam locomotive has passed the limit of its usefulness for local and feeder-line service. Its cost is large, its mechanism complex, and its weight is the maximum that is safe for track structures. Motor tractors have fewer parts, a smaller number of wearing parts, and their useful service period will equal that of the steam locomotive.

Few branch lines pay as independent units. This should not be so. The introduction of motor-car railways would remove one of the main causes for receiverships and realize the hope of new regions for efficient transportation service. The schedule speed of motor-car railway equipment should compare favorably with that of the best steam railroads.

Electric railways are not considered appropriate for the general field of motor-car railway service on account of their very expensive installation and equipment. There is no reason, however, why motor-car railway equipment could not be operated over electric lines with which they might connect. Storage-battery cars should by all means be included among the efficient units of modern railway equipment that constitute a prime factor in transportation.

Motor cars of appropriate capacity to satisfactorily handle the average business of branch lines and independent pioneer lines can be operated, except under exceptional conditions, at 8 to 12 cents per car mile and with a flexibility of service that will readily respond to momentary variations in traffic requirements. The existing types of motor-railroad cars, approximating the

dimension of standard cars, are, according to the best information obtainable, operated at a cost of from 18 to 24 cents per car or train mile. The first estimate for the smaller motor railroad cars would cover the cost of handling the average local passenger and packet freight business in the sparse territory of steam railroads in a manner that would result in undoubted economies.

The CHAIRMAN. The next paper will be by Señor Don Guillermo Campos, minister of Honduras in Guatemala, on the subject of "The resources and commercial development of Honduras."

ESTUDIO SOBRE LOS RECURSOS DE LA REPÚBLICA DE HONDURAS Y SU DESARROLLO COMERCIAL.

Por GUILLERMO CAMPOS,
Ministro de Honduras en Guatemala.

Hay una relación tan estrecha entre el comercio de un país y el desarrollo que éste hubiera adquirido en sus diversas manifestaciones, que cuando se trata de lo uno, para procurar su mejor conocimiento, conviene referirse a lo otro. Esta conveniencia se justifica sobre todo al ocuparme de la República de Honduras, que es país joven de la América Central y necesita darse a conocer para percibir con ello consiguientes frutos.

Muy joven es realmente la República de Honduras, pero no obstante eso y a pesar de otros motivos del orden político muy relacionados con su posición geográfica, ha alcanzado sin duda en corto tiempo un desarrollo relativamente grande. Su suelo exuberante, su benigno clima y las condiciones excepcionales de su riqueza natural, han contribuido, junto con la iniciativa de todos los gobiernos, a lograr tan plausible resultado.

Los gobiernos, encargados justamente de dirigir la Nación desde los primeros pasos de su vida autónoma, llevan hasta la fecha la principal iniciativa en todo orden de adelanto; y de esta suerte los que emprenden obras de manifiesta utilidad, siempre encuentran el debido apoyo en las autoridades o en las disposiciones de una previsora ley. Con tal sistema se ha marchado hacia el progreso aceleradamente o con sensible lentitud, pero experimentando cada vez la natural satisfacción que produce un ánimo dispuesto, ante los resultados del presente o los de un halagüeño porvenir.

Cuenta la República de Honduras con 932 escuelas primarias que sostiene el Gobierno para difundir ampliamente la enseñanza elemental y asimismo con colegios y escuelas superiores, Facultad de Derecho y Medicina y otros establecimientos de instrucción. Con todos esos centros que se procura dotar de la mejor manera, seleccionando maestros, implantando sistemas modernos y volviéndolos objeto predilecto de la acción administrativa, se hace guerra a la ignorancia y se realiza la mayor cultura nacional. Además, los Gobiernos envían anualmente al extranjero cierto número de jóvenes a estudiar Ingeniería, Milicia, Comercio y otras profesiones, con el compromiso de servir en el ramo de la enseñanza o en el que corresponda al título adquirido tan pronto como verifiquen su regreso. Merced a tales prácticas e intentos siempre realizados en el transcurso de los años, el país levanta su nivel intelectual; y a la fecha lejos de experimentar atraso a ese respecto, se satisface con el éxito alcanzado.

No sucede lo propio en el progreso material, que es problema de más difícil solución pues demanda, como en todas partes, fuertes e inmediatos desembolsos de dinero que no siempre resisten las arcas nacionales. Si dicho problema estuviera ya resuelto, el país se llamaría de una vez civilizado; mas

hasta ahora marcha hacia ello luchando con perseverancia y removiendo, aunque sea lentamente, los obstáculos que encuentra en su camino.

Tiene Honduras, a la fecha, seis líneas férreas que surgen de la Costa Atlántica con rumbo al interior. Suman todas un total de 517 kilómetros, pero se trabaja activamente en prolongarlas. Los ferrocarriles constituyen el más grande anhelo de los hondureños, porque son imperiosamente necesarios para explotar de una vez las intactas campiñas que existen como despreciadas, y son indispensables sobre todo, para exportar las riquezas que yacen en el suelo y cambiarlas por el oro americano.

No habiéndose resuelto todavía el problema ferroviario, se han construído y se construyen grandes carreteras en las regiones centrales y del Sur: por una de ellas—que es espléndida—comunica la capital de la República con su puerto del Pacífico, usando de automóviles y carros de tracción. Esas vías han promovido, como era de esperarse, un ensanche de la agricultura en las regiones que atraviesan y un notable incremento comercial.

El cultivo que constituye poderoso patrimonio es el de bananos, que se envían diariamente a los Estados Unidos, en cantidad que no baja de 8,000,000 de racimos al año. Después de ése hay otros que dan múltiples productos en menor escala, mas nacientes todavía, serán luego de vasta utilidad. Uno de ellos es el de la caña de azúcar, que ya se está ensanchando. En La Ceiba, por ejemplo, existe un ingenio azucarero capaz de competir en breve con los más notables de la región antillana.

La crianza de ganado vacuno constituye otro patrimonio de importancia. Todo el país es ganadero pero la costa del Norte, que cultiva grandes campos de zacate, selecciona razas y practica sistemas ya perfeccionados, es merecedora de especial mención. La cantidad de ganado vacuno, según viejo y último catastro que se me ofrece a la vista, es de 500,000 cabezas, más o menos. Gran cifra es esa si se toma en cuenta que aún se practican en la producción sistemas primitivos por carecer hasta ahora de un buen mercado de consumo. Sin ese estímulo, que en vano ha sido procurado, no es posible el incremento, como sucede con otros frutos de la actividad esparcidos por todo el territorio.

La superficie de Honduras es de 120,000 kilómetros cuadrados que hoy pueblan más de 550,000 habitantes. La desproporción salta a la vista, mas el exceso de terreno implica por fortuna una abundancia de recursos naturales que no sólo satisfacen la vida del presente, sino que constituyen vasto campo de reserva para el porvenir. Para dar idea de ésto es oportuno reproducir un párrafo de artículo publicado en la revista "Centro-América," referente al valor de las maderas en la Mosquitia y que dice así: "Existen en la Mosquitia, según datos auténticos que tenemos a la vista, más de noventa millones de árboles de pino; más de cuarenta y cinco millones de árboles de caoba y como catorce millones de otros árboles." Si el Gobierno de Honduras pudiera exportar esas maderas y venderlas en mercados extranjeros ¡cuántos milones podrían producir! Mas los Gobiernos, es sabido, no son buenos empresarios, ni sería posible por ahora a ninguno de estos países afrontar empresas colosales.

Sirviéndonos de base recientes propuestas hechas al Gobierno de Honduras por especuladores de poca responsabilidad que pretenden la explotación de algunas fracciones de la Mosquitia, podemos calcular el valor de esas maderas en la forma siguiente:

	Oro americano.
90,000,000 de árboles de pino a $0.25 cada uno	$22, 500, 000. 00
45,000,000 de árboles de cedro y de caoba, a $5.00 cada uno	225, 000, 000. 00
14,000,000 de otros árboles a $0.10 cada uno	1, 400, 000. 00
Total en oro americano	248, 900, 000. 00

Tal cifra que se obtiene de un solo negocio que se hiciera en tan pequeña parte del territorio de Honduras da noción de su inmensa riqueza; mas la idea hasta se vuelve inconcebible si se toma en consideración la abundancia de las minas, el número de las cuales no se puede siquiera precisar. Las hay de oro, plata, platino, telurio, cobre, plomo, zinc, estaño, níquel, hierro, petróleo, ópalos, etc., pero muy pocas explotándose por la dificultad que ofrece el transporte de grandes maquinarias. "Las principales minas en laboreo son: El Rosario—la mayor de Centro-América, que produce $3,000,000 de pesos plata al año, más o menos; las de El Fénix, Agalteca, Aramecina, El Socorro, El Tránsito, etc. De 1912 a 1913—último dato que tenemos a la mano—la exportación de oro en pasta fué de $70,065.00; oro y plata en cianuro $1,162,561.00; plata en bruto $32,988.00; plata acuñada, $69,619.00." (Todo calculado en plata hondureña, que tiene un cambio actual de 36 centavos oro americano por cada peso.)

Adquirir la propiedad de minas es muy fácil y se logra a título gratuito, como sucede con la de terrenos: se denuncian ante las autoridades pidiendo su titulación y eso basta, no importando que el solicitante sea nacional o extranjero. Y es que la ley hondureña es expedita para todo el mundo, liberal como muy pocas y expresa por eso a cada instante el deseo de que todo sea aprovechado por cualquiera, provocando así una inmigración en que cifra el país su pronto desarrollo. En tal sentido ante ella el extranjero es igual al hondureño; mas sobrepujando a la mente de la ley, el nacional recibe al inmigrante como hermano.

II.

El desarrollo comercial marcha en relación con lo que dejo dicho: con el número y cultura de los habitantes, con el movimiento agrícola, con los medios de comunicación, leyes, costumbres, etc. Obra sin restricciones y antes bien las leyes lo protegen y los gobiernos lo expeditan estableciendo vías de transporte, telégrafos, teléfonos y dictando medidas con tal fin. De esta suerte se amolda a las condiciones del país, se naturaliza con el medio ambiente y así, a primera intención, se puede apreciar su magnitud.

La forma en que se verifica es la de una constante compraventa de productos interiores y artículos o mercaderías que se importan, aunque se efectúan también especulaciones bancarias en pequeña escala. De este modo el comerciante se concreta a comprar, exportar, introducir y vender pacientemente, con el natural propósito de ensanchar sus intereses y atraer la riqueza a sus arcas.

Su acción se desarrolla con los principales países europeos, con los Estados Unidos y con las Repúblicas vecinas por los puertos mayores de Cortés, La Ceiba, Tela, Trujillo y Roatán, en el Atlántico; y por el de Amapala en el Pacífico. En los primeros trafican barcos de la "United Fruit Company," de "Vaccaro Bros.," de la "Cuyamel Fruit Company," de la "Atlantic Fruit Company," de la "Hamburg Amerika Linie" y goletas nacionales que hacen el comercio costero; y en Amapala, barcos de la "Pacific Mail," de la "Kosmos Linie" y de la "Salvador Railway." La guerra actual de Europa ha retirado a muchos de ellos.

El monto de las importaciones de mercaderías en el año económico próximo anterior fué de $12,831,696 plata y el de las exportaciones $7,952,420, de igual moneda. Como se ve, esta cifra no es muy grande y es que el comercio necesita, sin lugar a duda, de una nueva orientación: practicar un sistema desposeído de rutinarismo y amoldado a la época. Debe el comerciante estimularse con la perspectiva de un mejoramiento y procurar también el de sus clientes; debe ser menos egoísta, más amplio y liberal; y al extender su acción dentro del límite de sus aptitudes, debe dar cultura al ejercicio mercantil; debe, en una palabra, cambiar la vieja escuela por otra más inteligente.

No menos necesaria es una modificación del mecanismo o forma en que el comercio se ha venido realizando: año tras año se ven las mercancías andar la misma ruta dispendiosa como sujetas a un carril. Del fabricante hasta el consumidor pasan por el engranaje de muchos inútiles intermediarios que lejos de expeditar encarecen el negocio y lo vuelven complicado. Deben en lo posible desterrarse esos parásitos y para lograr tal fin, han de unir sus voluntades: el productor, el comerciante y los legisladores.

El comercio principal se ha venido realizando con Europa, como sucede en la mayoría de los países latinoamericanos. No es por eso pequeño el de los Estados Unidos, que le sigue en importancia.

Europa, ya por previsión o por necesidad, no ha despreciado la pequeñez de estos pueblos para mantener con ellos sus negocios; y tomándolos en cuenta como son, o como habrán de ser, no sólo espera sus demandas sino que los impulsa con ofertas, les facilita el transporte y los alienta con su crédito. Eso ha influído en la supremacía que hoy ejerce, aunque por ningún motivo podrá, a mi juicio, perdurar.

Los Estados Unidos que es un país joven, vigoroso, no se dejará en lo sucesivo hacer la competencia: desde la cumbre de su poderío ha dirigido su mirada por todo el continente y se apresta ya a la lucha con impulsos de titán. No sucumbirá: a todas partes enviará sus múltiples productos: buenos, baratos y al alcance general; en todos los puertos y ciudades costeará exhibiciones mercantiles de múltiples muestrarios realizables; celebrará tratados de comercio, fundará bancos, construirá ferrocarriles, cultivará bosques y hará por fin una campaña de progreso más potente que la actual guerra europea. Ese oro que hasta hoy sirve para depreciar nuestra moneda, con la prerrogativa de ser oro aun siendo muchas veces sol, luego vendrá aquí; y ante ese influjo poderoso y ante sus formidables consecuencias, la vieja Europa se quedará en Europa contemplando el cuadro con asombro.

Mientras tanto Honduras, el pequeño país rico a que me vengo refiriendo, constituye un precioso campo de reserva para dar gustosa entrada a ese caudal de civilización.

The CHAIRMAN. The next paper will be by Mr. James T. Newton, First Assistant Commissioner of Patents of the United States, on the subject of "A plea for the ratification of the Buenos Aires trade-mark convention of August 20, 1910."

A PLEA FOR THE RATIFICATION OF THE BUENOS AIRES TRADE-MARK CONVENTION OF AUGUST 20, 1910.

By JAMES T. NEWTON,

First Assistant Commissioner of Patents of the United States.

The commercial importance of trade-marks has increased during the last 40 years by leaps and bounds until to-day they constitute the largest asset of many commercial establishments. Their value in the United States has probably increased in about the same ratio as the number registered, which in 1871 was 486 and in 1915 was 6,253.

This large increase in the number and value of trade-marks is attributable largely to two causes: First, the readiness with which they lend themselves to modern advertising methods. They are catchy, easily remembered guideposts which enable the purchaser to repeat every satisfactory buying experience and to avoid the repetition of every unsatisfactory one.

It has been said that trade-marks and advertising are the greatest forces in modern commercial transactions, and that working together their tendencies are to raise qualities and standardize them and to reduce prices and stabilize them. Advertisements of trade-marked goods fill the daily papers, and magazine readers frequently find more space devoted to the exploitation of trade-marked goods than to the discussion of current topics. The adage to the effect that "A rose by any other name would smell as sweet," and therefore that there is nothing in a name, has been displaced at least in the commercial world by the adage that "A good name is rather to be chosen than great riches."

The second cause for the large increase in the importance of trade-marks is the modern favorable attitude of the courts in practically all countries. This attitude, especially of equity courts, is based on their endeavor to encourage commercial integrity of producers and sellers. They recognize that a merchant who relies on his superior goods identified by a trade-mark is a benefactor to commerce.

A trade-mark is of no value until it is favorably and extensively known. To advertise it ordinarily requires large expenditure of money, and the property right acquired in the marks is of such a fugitive, intangible character that it is the subject of continual attack by pirates wishing to trade on the reputation of their honest competitors. The ever-increasing frequency of communication between the American Republics will often extend the reputation of valuable trade-marks from one country to another and their combined efforts will be necessary to prevent trade-mark piracy.

A few concrete illustrations of what has already occurred on this line will show the evils to be overcome and the difficulties that will be encountered in applying the remedy.

One of the largest cereal manufacturers in the United States last year attempted to extend its trade to one of the South American countries, but found that an unscrupulous rival had preceded it by a few months and registered its most valuable mark, which it had been advertising at enormous expense for 30 years, thus shutting out its valuable trade built up under its home trade-mark. A $15,000 consignment of lead pencils from the United States to a Central American Republic was confiscated not long ago at the port of entry because they bore a trade-mark which infringed a trade-mark recently registered by a business rival in the receiving country, although the United States merchant had registered his United States mark 20 years before. One of the largest manufacturers of motor cycles in this country, whose trade-mark is his most valuable asset, can not export to three other American Republics because a pirate, knowing of the reputation of his goods in this country, has succeeded in registering his trade-mark in each of these countries. One of the most valuable trade-marks in the tobacco business registered in the United States has very recently been registered by a rival of its owner in seven Central and South American countries.

The United States consul general at Buenos Aires writes:

The appropriation of foreign trade-marks has reached a very serious state in recent years. * * * If an Argentine firm usurps the mark of a foreign manufacturer and registers it, then the real owner is helpless, for the new owner can take legal action against the real owner of the mark for imitating or fraudulent use of same. The rightful owner may even have his merchandise excluded from the market simply because it bears his own mark. It has happened that foreign manufacturers have had to leave the market after having spent much time and money in building up their business, or have had to pay an indemnity to a local firm which has been brazen enough to register a world-known mark.

These and many other similar incidents cry loudly for cooperation on the part of the American Republics to attempt to prevent this unfair competition in trade and thus encourage honestly conducted commerce between these countries.

The difficulties to be overcome are serious but not insurmountable. Probably the most serious arises from the nature of the trade-mark laws of the various Republics.

For the purposes of this paper these laws may be divided into what are technically known as, first, "attributive" laws, and, second, "declaratory" laws. The first create the exclusive rights in a mark usually by registration. Sometimes by simple announcement that a particular mark has been adopted. The second only provide for giving notice usually by registration of the rights already acquired by prior use of the mark. The right to the mark being based on the common-law right of priority of adoption and subsequent continuous use.

The attribute or creative laws are in force in most of the southern Republics, while the declaratory laws which are based on the English common law prevail in the northern Republics. Both systems have their merits and demerits. The attributive system lends itself peculiarly to the frauds before enumerated, while the declaratory system is weak in not requiring notice to the public throughout the country of the adoption of a mark. These different systems give rise to difficulties in framing treaties for the better protection of trade-marks used in commerce between the American Republics.

Again, some of the American Republics refuse to recognize numerals as trade-marks, while in others they are registrable, and some of these countries require word trade-marks to be entirely fanciful, while others are more liberal in registering words descriptive of the goods. "Uneeda" for biscuits has been protected in the United States, while other countries have refused to protect this word as a trade-mark on the ground that it is only a misspelling of "you need a," an advertising phrase which anyone may use. On the other hand, "Economy" has been refused registration in the United States, but allowed in other countries as a valid trade-mark. Still these are border-line cases and even the courts of the same country might differ as to the legality of such marks.

In the United States, under the statute of February 20, 1905, nearly all words are registrable if they have been in use 10 years prior to the passage of the statute; but there is no other American Republic that has a corresponding provision.

But the difficulties indicated are not insurmountable. The principles underlying trade-mark protection are quite similar in all the American Republics, and no reason exists why a treaty or convention may not be framed to cover the points of similarity and practically to prevent piracy of trade-marks of one country by dishonest traders of any other country.

Such a convention has been proposed by representatives from the American Republics and is as follows:

CONVENTION.

PROTECTION OF TRADE-MARKS.

Their Excellencies the Presidents of the United States of America, the Argentine Republic, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Salvador, Uruguay, and Venezuela;

Being desirous that their respective countries may be represented at the Fourth International American Conference, have sent thereto the following delegates, duly authorized to approve the recommendations, resolutions, con-

ventions, and treaties which they might deem advantageous to the interest of America:

United States of America: Henry White, Enoch H. Crowder, Lewis Nixon, John Bassett Moore, Bernard Moses, Lamar C. Quintero, Paul Samuel Reinsch, David Kinley.

Argentine Republic: Antonio Bermejo, Eduardo L. Bidau, Manuel A. Montes de Oca, Epifanio Portela, Carlos Rodríguez Larreta, Carlos Salas, José A. Terry, Estanislao S. Zeballos.

United States of Brazil: Joaquim Murtinho, Domicio da Gama, José L. Almeida Nogueira, Olavo Bilac, Gastão da Cunha, Herculano de Freitas.

Republic of Chile: Miguel Cruchaga Tocornal, Emilio Bello Codecido, Aníbal Cruz Díaz, Beltrán Mathieu.

Republic of Colombia: Roberto Ancízar.

Republic of Costa Rica: Alfredo Volio.

Republic of Cuba: Carlos García Vélez, Rafael Montoro y Valdés, Gonzalo de Quesada y Aróstegui, Antonio Gonzalo Pérez, José M. Carbonell.

Dominican Republic: Américo Lugo.

Republic of Ecuador: Alejandro Cárdenas.

Republic of Guatemala: Luis Toledo Herrarte, Manuel Arroyo, Mario Estrada.

Republic of Haiti: Constantin Fouchard.

Republic of Honduras: Luis Lazo Arriaga.

Mexican United States: Victoriano Salado Alvarez, Luis Pérez Verdía, Antonio Ramos Pedrueza, Roberto A. Esteva Ruiz.

Republic of Nicaragua: Manuel Pérez Alonso.

Republic of Panama: Belisario Porras.

Republic of Paraguay: Teodosio González, José P. Montero.

Republic of Peru: Eugenio Larrabure y Unánue, Carlos Alvarez Calderón, José Antonio de Lavelle y Pardo.

Republic of Salvador: Federico Mejía, Francisco Martínez Suárez.

Republic of Uruguay: Gonzalo Ramírez, Carlos M. de Pena, Antonio M. Rodríguez, Juan José Amézaga.

United States of Venezuela: Manuel Díaz Rodríguez, César Zumeta.

Who, after having presented their credentials, and the same having been found in due and proper form, have agreed upon the following convention for the protection of trade-marks:

Article I. The signatory nations enter into this convention for the protection of trade-marks and commercial names.

Art. II. Any mark duly registered in one of the signatory States shall be considered as registered also in the other States of the union, without prejudice to the rights of third persons and to the provisions of the laws of each State governing the same.

In order to enjoy the benefit of the foregoing the manufacturer or merchant interested in the registry of the mark must pay, in addition to the fees or charges fixed by the laws of the State in which application for registration is first made, the sum of $50 gold, which sum shall cover all the expenses of both bureaus for the international registration in all the signatory States.

Art. III. The deposit of a trade-mark in one of the signatory States produces in favor of the depositor a right of priority for the period of six months, so as to enable the depositor to make the deposit in the other States.

Therefore the deposit made subsequently and prior to the expiration of this period can not be annulled by acts performed in the interval, especially by another deposit, by publication, or by the use of the mark.

Art. IV. The following shall be considered as trade-mark: Any sign, emblem, or especial name that merchants or manufacturers may adopt or apply to their goods or products in order to distinguish them from those of other manufacturers or merchants who manufacture or deal in articles of the same kind.

Art. V. The following can not be adopted or used as trade-mark: National, provincial, or municipal flags or coats of arms; immoral or scandalous figures; distinctive marks which may have been obtained by others or which may give rise to confusion with other marks; the general classification of articles; pictures or names of persons without their permission; and any design which may have been adopted as an emblem by any fraternal or humanitarian association.

The foregoing provisions shall be construed without prejudice to the particular provisions of the laws of each State.

Art. VI. All questions which may arise regarding the priority of the deposit or the adoption of a trade-mark shall be decided with due regard to the date of the deposit in the State in which the first application was made therefor.

ART. VII. The ownership of a trade-mark includes the right to enjoy the benefits thereof and the right of assignment or transfer, in whole or in part, of its ownership or its use in accordance with the provisions of the laws of the respective States.

ART. VIII. The falsification, imitation, or unauthorized use of a trade-mark, as also the false representation as to the origin of a product, shall be prosecuted by the interested party in accordance with the laws of the State wherein the offense is committed.

For the effects of this article, interested parties shall be understood to be any producer, manufacturer, or merchant engaged in the production, manufacture, or traffic of said product, or in the case of false representation of origin, one doing business in the locality falsely indicated as that of origin, or in the territory in which said locality is situated.

ART. IX. Any person in any of the signatory States shall have the right to petition and obtain in any of the States, through its competent judicial authority, the annulment of the registration of a trade-mark, when he shall have made application for the registration of that mark, or of any other mark, calculated to be confused, in such State, with the mark in whose annulment he is interested, upon proving,

(*a*) That the mark the registration whereof he solicits has been employed or used within the country prior to the employment or use of the mark registered by the person registering it or by the persons from whom he has derived title;

(*b*) That the registrant had knowledge of the ownership, employment, or use in any of the signatory States of the mark of the applicant the annulment whereof is sought prior to the use of the registered mark by the registrant or by those from whom he has derived title;

(*c*) That the registrant had no right to the ownership, employment, or use of the registered mark on the date of its deposit;

(*d*) That the registered mark had not been used or employed by the registrant or by his assigns within the term fixed by the laws of the State in which the registration shall have been made.

ART. X. Commercial names shall be protected in all the States of the union, without deposit or registration, whether the same form part of a trade-mark or not.

ART. XI. For the purposes indicated in the present convention a union of American Nations is hereby constituted, which shall act through two international bureaus established one in the city of Habana, Cuba, and the other in the city of Rio de Janeiro, Brazil, acting in complete accord with each other.

ART. XII. The international bureaus shall have the following duties:

1. To keep a register of the certificates of ownership of trade-mark issued by any of the signatory States.

2. To collect such reports and data as relate to the protection of intellectual and industrial property and to publish and circulate them among the nations of the union, as well as to furnish them whatever special information they may need upon this subject.

3. To encourage the study and publicity of the questions relating to the protection of intellectual and industrial property; to publish for this purpose one or more official reviews, containing the full texts or digest of all documents forwarded to the bureaus by the authorities of the signatory States.

The Governments of said States shall send to the International American Bureau their official publications which contain the announcements of the registration of trade-marks, and commercial names, and the grants of patents and privileges as well as the judgments rendered by the respective courts concerning the invalidity of trade-marks and patents.

4. To communicate to the Governments of the union any difficulties or obstacles that may oppose or delay the effective application of this convention.

5. To aid the Governments of the signatory States in the preparations of international conferences for the study of legislation concerning industrial property, and to secure such alterations as it may be proper to propose in the regulations of the union, or in treaties in force to protect industrial property. In case such conferences take place, the directors of the bureaus shall have the right to attend the meetings and there to express their opinions, but not to vote.

6. To present to the Governments of Cuba and of the United States of Brazil, respectively, yearly reports of their labors, which shall be communicated at the same time to all the Governments of the other States of the union.

7. To initiate and establish relations with similar bureaus and with the scientific and industrial associations and institutions for the exchange of publications, information, and data conducive to the progress of the protection of industrial property.

8. To investigate cases where trade-marks, designs, and industrial models have failed to obtain the recognition of registration provided for by this convention, on the part of the authorities of any one of the States forming the union, and to communicate the facts and reasons to the Government of the country of origin and to interested parties.

9. To cooperate as agents for each one of the Governments of the signatory States before the respective authorities for the better performance of any act tending to promote or accomplish the ends of this convention.

ART. XIII. The bureau established in the city of Habana, Cuba, shall have charge of the registration of trade-marks coming from the United States of America, Mexico, Cuba, Haiti, the Dominican Republic, El Salvador, Honduras, Nicaragua, Costa Rica, Guatemala, and Panama.

The bureau established in the city of Rio de Janeiro shall have charge of the registration of trade-marks coming from Brazil, Uruguay, the Argentine Republic, Paraguay, Bolivia, Chili, Peru, Ecuador, Venezuela, and Colombia.

ART. XIV. The two international bureaus shall be considered as one, and for the purpose of the unification of the registrations it is provided:

(*a*) Both shall have the same books and the same accounts kept under an identical system.

(*b*) Copies shall be reciprocally transmitted weekly from one to the other of all applications, registrations, communications, and other documents affecting the recognition of the rights of owners of trade-marks.

ART. XV. The international bureau shall be governed by identical regulations, formed with the concurrence of the Governments of the Republic of Cuba and of the United States of Brazil and approved by all the other signatory States.

Their budgets, after being sanctioned by the said Governments, shall be defrayed by all the signatory States in the same proportion as that established for the International Bureau of the American Republics at Washington, and in this particular they shall be placed under the control of those Governments within whose territories they are established.

The international bureaus may establish such rules of practice and procedure, not inconsistent with the terms of this convention, as they may deem necessary and proper to give effect to its provisions.

ART. XVI. The Governments of the Republic of Cuba and of the United States of Brazil shall proceed with the organization of the Bureaus of the International Union as herein provided, upon the ratification of this convention by at least two-thirds of the nations belonging to each group.

The simultaneous establishment of both bureaus shall not be necessary; one only may be established if there be the number of adherent Governments provided for above.

ART. XVII. The treaties on trade-marks previously concluded by and between the signatory States, shall be substituted by the present convention from the date of its ratification, as far as the relations between the signatory States are concerned.

ART. XVIII. The ratifications or adhesion of the American States to the present convention shall be communicated to the Government of the Argentine Republic, which shall lay them before the other States of the union. These communications shall take the place of an exchange of ratifications.

ART. XIX. Any signatory State that may see fit to withdraw from the present convention shall so notify the Government of the Argentine Republic, which shall communicate this fact to the other States of the union, and one year after the receipt of such communication this convention shall cease with regard to the State that shall have withdrawn.

In witness whereof the plenipotentiaries and delegates sign this convention and affix to it the seal of the Fourth International American Conference.

Made and signed in the city of Buenos Ayres, on the 20th day of August, in the year 1910, in Spanish, English, Portuguese, and French, and filed in the Ministry of Foreign Affairs of the Argentine Republic in order that certified copies may be made, to be forwarded through appropriate diplomatic channels to each one of the signatory nations.

For the United States of America:
HENRY WHITE.
ENOCH H. CROWDER.
LEWIS NIXON.
JOHN BASSETT MOORE.
BERNARD MOSES.
LAMAR C. QUINTERO.
PAUL S. REINSCH.
DAVID KINLEY.

For the Argentine Republic:
ANTONIO BERMEJO.
EDUARDO L. BIDAU.
MANUEL A. MONTES DE OCA.
EPIFANIO PORTELA.
CARLOS SALAS.
JOSÉ A: TERRY.
ESTANISLAO S. ZEBALLOS.

For the United States of Brazil:
JOAQUIM MURTINHO.
DOMICIO DA GAMA.
JOSÉ L. ALMEIDA NORGUEIRA.
OLAVO BILAC.
GASTÃO DA CUNHA.
HERCULANO DE FREITAS.

For the Republic of Chile:
MIGUEL CRUCHAGA TOCORNAL.
EMILIO BELLO CODECIDO.
ANÍBAL CRUZ DÍAZ.
BELTRÁN MATHIEU.

For the Republic of Colombia:
ROBERTO ANCÍZAR.

For the Republic of Costa Rica:
ALFREDO VOLIO.

For the Republic of Cuba:
CARLOS GARCÍA VELEZ.
RAFAEL MONTORO Y VALDÉS.
GONZALO DE QUESADA Y ARÓSTEGUI.
ANTONIO GONZALO PÉREZ.
JOSÉ M. CARBONELL.

For the Dominican Republic:
AMÉRICO LUGO.

For the Republic of Ecuador:
ALEJANDRO CÁRDENAS.

For the Republic of Guatemala:
LUIS TOLEDO HERRARTE.
MANUEL ARROYO.
MARIO ESTRADA.

For the Republic of Haiti:
CONSTANTIN FOUCHARD.

For the Republic of Honduras:
LUIS LAZO ARRIAGA.

For the Mexican United States:
VICTORIANO SALADO ALVAREZ.
LUIS PÉREZ VERDÍA.
ANTONIO RAMOS PEDRUEZA.
ROBERTO A. ESTEVA RUIZ.

For the Republic of Nicaragua:
MANUEL PÉREZ ALONSO.

For the Republic of Panama:
BELISARIO PORRAS.

For the Republic of Paraguay:
TEODOSIO GONZÁLEZ.
JOSÉ P. MONTERO.

For the Republic of Peru:
EUGENIO LARRABURE Y UNÁNUE.
CARLOS ALVAREZ CALDERÓN.
JOSÉ ANTONIO DE LAVALLE Y PARDO.

For the Republic of Salvador:
FEDERICO MEJÍA.
FRANCISCO MARTÍNEZ SUÁREZ.
For the Republic of Uruguay:
GONZALO RAMÍREZ.
CARLOS M. DE PENA.
ANTONIO M. RODRÍGUEZ.
JUAN JOSÉ AMÉZAGA.
For the United States of Venezuela:
MANUEL DÍAZ RODRÍGUEZ.
CÉSAR ZUMETA.

The names of the signers of this convention constitute a guarantee of the wisdom and fairness of its provisions. Many of these men are members of the present Pan American Congress. A perusal of the provisions of the convention shows that they comprehended the situation and provided for the remedies, and if the spirit of the convention is finally carried out it will prevent the abuses I have enumerated.

The convention further provides that two bureaus shall be established—one in the city of Habana, Cuba, the other in Rio de Janeiro, Brazil; the bureau in Habana having charge of the registration of trade-marks coming from the United States of America, Mexico, Cuba, Haiti, the Dominican Republic, Salvador, Honduras, Nicaragua, Costa Rica, Guatemala, and Panama, and the bureau in Rio de Janeiro having charge of the registration of trade-marks coming from Brazil, Uruguay, Argentine Republic, Paraguay, Bolivia, Chile, Peru, Ecuador, Venezuela, and Colombia.

Article 16 provides that upon the ratification of this convention by at least two-thirds of the nations belonging to each group, the Governments of Cuba and Brazil shall proceed to organize these bureaus.

In compliance with this provision of the convention, the following countries have ratified the convention: Brazil, November 9, 1914; Cuba, June 13, 1912; Dominican Republic, April 18, 1912; Ecuador, April 8, 1914; Guatemala, May 10, 1912; Honduras, February 13, 1913; Nicaragua, April 24, 1913; Panama, June 12, 1913; Paraguay, August 26, 1913; United States, May 31, 1911.

The first group lacks only one country of having enough to complete the two-thirds necessary for the authorization of the establishment of the bureau in Habana, and it is the main object of this paper to urge the desirability of completing the requisite number of ratifications of this convention by the Republics.

Of course, after the ratification of this convention by a sufficient number of the Republics, legislation will be necessary to provide the machinery for carrying it into effect and undoubtedly it will be found desirable from time to time to change some of the articles of the convention.

It is believed that the fees charged for registration will be sufficient to defray the expenses of the bureaus, but in the case of the United States, at least, further legislation will probably be necessary to carry out some of the provisions of the convention.

In the case of Foster *v.* Neilson (2 Peters, 314), Chief Justice Marshall, delivering the opinion of the court, in discussing the effect of the United States Constitution on treaties, stated:

> A treaty is, in its nature, a contract between two nations, not a legislative act. It does not generally effect of itself the object to be accomplished, especially so far as its operation is infraterritorial, but is carried into execution by the sovereign power of the respective parties to the instrument.
>
> In the United States a different principle is established. Our Constitution declares a treaty to be the law of the land. It is consequently to be regarded in courts of justice as equivalent to an act of the legislature whenever it operates of itself without the aid of any legislative provision. But when the terms of the stipulation import a contract, when either of the parties engaged to per-

form a particular act, the treaty addresses itself to the political, not the judicial department; and the legislature must execute the contract before it can become a rule for the court.

To the same effect is the opinion of Attorney General Miller in the case of Ferdinand Bourquin (1889 C. D., 253), and of the Court of Appeals of the District of Columbia in Rousseau *v.* Brown (104 O. G., 1120, 21 App. D. C., 73). The present United States trade-mark statutes already provide for carrying into effect many provisions of the convention. But these are details that can be taken care of as the necessities arise. The important step to be emphasized at this time is the ratification by a sufficient number of countries of this proposed convention.

The CHAIRMAN. We will now listen to a paper by Mr. Frederick Transom, of Philadelphia, on the subject of "Some possible reciprocal relations in the patent practice of the Pan American countries."

ON SOME POSSIBLE RECIPROCAL RELATIONS IN THE PATENT PRACTICE OF PAN AMERICAN COUNTRIES.

By FREDERICK TRANSOM,

Examiner United States Patent Office, Department of the Interior.

It is evident to all that the Latin and South American States have entered on a period of great industrial and commercial activity. The remarkable expansion of the United States along these lines might be ascribed to several different fundamental causes, such as immense and varied natural resources, the necessity of maintaining communication and exchange of manufactured products, etc. In all these lines of activity, however, will be found at work the powerful effect of the short clause of the United States Federal Constitution (art 1, clause 8), upon which its liberal patent laws are based.

The jurisdiction of the patent laws has been one of the most important and difficult trusts of the Federal judiciary, and anything that facilitates and simplifies the administration of such laws in and among the several sovereign States of the American Continent must inevitably contribute to their mutual good will and prosperity. One phase of the administration of patent laws in the United States turns on the relations of foreign patents and publications to the laws of the United States, and it has given rise to much litigation, uncertainty, and delay in fixing and enforcing patent rights. An effort will be made in this paper to indicate some lines of reciprocal action and possible uniformities of practice among the American States.

The United States Patent Office not only has original jurisdiction of the granting of patents for inventions, but also like jurisdiction of the registration of the trade-marks of commerce. A brief outline of United States trade-mark practice will be given as intimately connected with the subject of patents.

Copyright protection in the United States is under the control of the Librarian of Congress. No discussion will be given of this subject further than to call attention to two decisions of the Supreme Court of the United States, which fully explain the nature of copyright and of the proceedings for recovery under the copyright act. These decisions are of especial interest to noncitizens of the United States, they are: American Tobacco Co. *v.* Werckmeister, 207 United States Reports, page 284, and Werckmeister *v.* American Tobacco Co., 207 United States Reports, 375.

The patent laws of no two Governments are alike. Practically all the great manufacturing countries have such laws, and, when it is considered that their

object and well-known effect in modern times is to stimulate manufacturing and research, it would seem that at least the substantive part of such laws would be everywhere much the same. Instead of this uniformity, however, there are few better fields for economists to sort the wheat from the chaff than in the endeavor to discover and to obtain general recognition for the really essential principles that should control the grant of patents. A clear understanding of these principles as applied to the domestic practice of each Government would contribute greatly to the ready establishment and enforcement of patent rights for an invention not only in any particular country but in all countries, and would considerably lessen the necessity for the indirect adjustments effected by treaties.

The early growth of the United States patent system will be found explained in considerable detail in an address delivered by Commissioner of Patents Ewing before the thirty-seventh annual meeting of the American Bar Association, entitled: "Bearing of the Contract Theory of Patents on Certain Defenses." As there pointed out, the best writers on the subject look on the grant of a patent as a contract between the Government and the inventor, according to which the Government confers a monopoly, limited as to time, on the inventor in exchange for a clear disclosure of the invention.

Whether the United States Congress that originally passed the patent statutes understood that it was dealing with a contractual relation or not, these statutes were so drawn that a good disclosure almost necessarily follows compliance with their terms. Since 1793 it has been a prime prerequisite to the grant of a patent that the inventor should impart his invention to the public in full, clear, concise and exact terms. The examiners of the Patent Office have always required substantial compliance with these requirements. In all steps of the prosecution of an application for a patent an inventor must stand ready to clear away any objections of obscurity or inoperativeness of disclosure, and it may be accepted as one of the principles of good patent practice that a valid patent must be based on a clear and operative disclosure. The sufficiency of a patent disclosure should not be left to the initiative and ability of inventors and their attorneys. It should be so thorough and definite that a person of only the ordinary skill in that art can derive from the patent full directions enabling him to actually use the invention.

The United States rejects applications for patents on the prior allowance of a patent for the same invention to another person by a foreign government, but many of these foreign patents, while undoubtedly relating to the same invention, have to be laid aside as references because their disclosures do not measure up to the exacting requirements of the United States practice. Whether the foreign patentee desires to take out a United States patent or not, an imperfect foreign disclosure operates to his disadvantage in the United States. In the former case it may be contended by his opponent in an interference proceeding in the United States office that the foreign patent should not avail as to dates of invention. In the latter case the foreign patentee may be obliged to pay royalties to a United States patentee who would have been barred if a clear and otherwise sufficient disclosure had been found in the foreign patent.

While on the subject of foreign patents as references it may not be amiss to note that the exact date at which a foreign patent becomes operative as a reference has been the cause of much discussion in United States practice. It would be profitless to review the status of the patents of the different countries in this respect, but it is a difficulty that should admit of easy avoidance as between nations desiring to honor and accept as worthy of credit certain

reciprocal obligations imposed by the official acts of each. The patent dates, effectively considered as reference dates, should be the same in all countries, both as to domestic and foreign citations, and there should be uniformity in practice on the question as to the advisability of using foreign patents as references. In United States practice the filing of the application establishes a date of reference which must be overcome by all subsequently filed applications. If there are any features in the patent systems of the several nations that cause a like date of reference in each to be incommensurable for all, so to speak, they should be reconciled.

The United States Government exchanges patents with several other Governments, and the inventors and scientists of each nation have undoubtedly reaped a rich harvest of ideas and information from the patents so exchanged. At the date of issue the patented art is usually not far behind the front wave of progress in the useful applications of science, sometimes it is in advance of it, and it seems reasonable to suppose that in order to improve what has been done a worker should bring to the task a full knowledge of what has already been accomplished. One of the anomalies of the United States patent system is that the laws for granting patents are probably the best in the world, and their sole object is to obtain disclosures of inventions, yet no special effort is made to place before inventors in an accessible form the information so obtained. As far as the Official Gazette of the office goes it is valuable to patent lawyers, but is of no service to the inventor himself in the matter of putting him in possession of the actual disclosures of which at best it is only an index.

The bound volumes of patents issued to the libraries and to the courts of the United States are also sealed books to the workers in the several various arts. The only way an inventor can profit by the accumulation of learning in any particular art is to come to Washington and trace that art in the ramifications of the classification system. Much of this work of gleaning intelligence from the files is done by expert searchers, paid by the companies who realize the importance of it not only as furnishing information to their staff of inventors but also as showing the probable value of any possible future patents. It would be the final step in the efficiency of the United States patent system if duplicates of the classified arts could be maintained in a number of the great cities of the Union. Steps are now being taken by which it is hoped to duplicate the classified patents of the United States at least in Canada, at Ottawa, and there should be a set of them in one or more of the South American Republics.

No attempt will be made to indicate what constitutes a good and sufficient disclosure before the United States Patent Office, but no searcher after truth in regard to the matter can disregard the Rules of Practice of the United States Patent Office. These rules have recently been revised, the new version having become effective January 1, 1916. They represent the experience and special knowledge of a large body of men for a period of over 100 years. Especial attention is called to the precise and rigid drawing requirements and to the handy and intelligible reproductions made possible because of these requirements. Any system of patent exchange between the nations would be greatly facilitated by having the patents of each nation of the same size and of the same character of mechanical excellence of execution.

This paper has laid stress on the necessity of getting a good disclosure in a patent specification and, further, on the date from which that disclosure should operate as a bar to the grant of further patents for the same invention. An endeavor will now be made to explain the character of claims by which an invention is identified in the United States office, and which determine the value of the patent to the inventor to a great extent.

The United States grants patents only to the actual inventor, or inventors if the invention is a joint one, and is the only Government that insists that the inventor distinctly point out and identify in the claim statements what he considers as his invention. The claims of a patent may relate to one of four different fields of invention, or the patent may fall into the class of design patents. To be patentable an invention must be identifiable with some one of the fields of invention noted. To quote from a standard textbook on the subject (Walker on Patents, 4th ed., 161): "A claim covers and secures a process, a machine, a manufacture, a composition of matter, or a design, and never the function or result of either."

From the above it will be noted that a claim of a United States patent must not only be rightly placed with respect to its class of invention; it must be a formal claim in that class. One of the marked differences between the claims of United States patents and those of European countries is that the latter permit functional claims; such claims do not definitely and structurally identify any given parts or agencies as constituting the invention; they are directed rather to the operation performed, or the result attained, which, while they may indeed be the ultimate object of the invention, are not representative of its constitutent elements. The very same result might be accomplished in a number of patentably different inventions, and accordingly no one of them can be definitely identified by the recital of the operation or result common to all of them. Much of the success of the United States system has been due to the so-called *apparatus* or *element* claims used.

One of the Federal judges in passing upon a patent case stated that there is no more difficult form of written discourse than the drafting of patent claims. A good claim can be recognized on its face, and furthermore if it is good, in that it is in consonance with the development of the art, it is a thing of beauty and a joy forever to all but infringers.

A design patent, as the name implies, is one taken out to protect a property right in an ornamental design or a special shape or configuration in structural work which is adapted to appeal to the esthetic taste. These patents have little in common with patents for inventions under United States practice, but are subject to many of the same rules of prosecution in the Patent Office, and since an ornamental design is one form or manifestation of inventive genius they should be grouped together.

TRADE-MARKS.

Trade-marks are not readily susceptible of condensed definition. They had honorable and serviceable employment in trade and commerce long before the importance of patents for inventions was recognized, and derive their validity and value from different considerations, compared to those which control when the validity and value of a patent is investigated.

The general nature of a trade-mark will be seen from the following quotation to be something which a person desires to restrict to his own use rather than to share its use with others, as in the case of a patent:

> Any name, symbol, letter, figure, or device adopted by the persons manufacturing or selling goods, and used or put upon such goods to distinguish them from those manufactured or sold by others and employed so often and for such length of time as to raise the presumption that the public would know that it was used to indicate ownership of the goods in the person manufacturing or selling them, constitutes his trade-mark. (Derringer *v.* Plate, 29 Calif., 292.)

The above quotation does not give the characteristics which should be found in the trade-mark before adoption. However, it may be stated generally that

the nearer a trade-mark conforms to the requirements of a common law technical trade-mark the more likely it is to be sustained in the courts and the more difficult infringement will be. These requirements are given in all the good texts on the subject. A trade-mark should not be chosen haphazardly. Its selection requires competent legal help, as much so as in the safe drawing up of a will or other instrument involving the ownership and care of property.

In registering a trade-mark the United States Patent Office does not confer a grant or title to the mark; such right must have been preexisting as preliminary to the registration, which, in itself, affords only *prima facie* evidence of ownership of the mark.

The United States Patent Office registers the trade-marks of foreigners upon a showing that the mark has previously been registered in the home country. Unfortunately certain of the trade-mark statutes are tied up with restrictive clauses as to what may be permitted to foreigners, being dependent upon what concessions are made to citizens of the United States in the country seeking registration for its citizens. All such restrictions should be eliminated, at least in dealings with the purpose of making trade-marks generally effective. Bargaining for advantage in such matters needlessly hampers an enlightened and progressive policy, having to do solely with the advancement of trade-mark protection alone. It is the policy and practice of the United States Patent Office to waive all doubts in favor of the inventors that seek its aid in the protection of their work. A like liberal policy should characterize the dealings of the United States Government in its reciprocal relations with the Latin and South American States as to patent and trade-mark laws. The actual property value involved in such mutual concessions may be considerable, but sinks to insignificance when it is considered that the progress of the arts and sciences are facilitated and in some cases made possible where without favorable laws advance would be forever impossible.

The following papers were presented and read by title at this session:

Necesidad de un convenio internacional sobre arqueo de buques mercantes, by Guillermo Lyons.

Comercio del Uruguay, by Pablo Fontaina.

Estadísticas de población y navegación, by Dirección General de Estadística de La República Oriental del Uruguay.

Régimen aduanero del Uruguay, by A. Idiartegaray.

Crédito y bancos, by Alejandro Tálice.

Necesidad de reformar las leyes impositivas relacionándolas con el catastro en la política económica y financiera de los pueblos, by Antonio F. Solari.

NECESIDAD DE UN CONVENIO INTERNACIONAL SOBRE ARQUEO DE BUQUES MERCANTES.

Por GUILLERMO LYONS,

Capitán General de Puertos de Uruguay.

Los países americanos al congregarse periódicamente para tratar asuntos relacionados con el bienestar y prosperidad común, demuestran que el espíritu de solidaridad que los unió en los primeros días de su existencia se ha transformado a través del tiempo en un sentimiento fraternal y honrando las ideas

democráticas que los animan, dan el ejemplo de aplicar en sus relaciones internacionales, los mismos principios de igualdad y de justicia que regulan su vida interna, propendiendo de ese modo al adelanto de la civilización.

Entre los asuntos de más importancia que han sido tratados en esas reuniones, figura el fomento de las vías de comunicaciones marítimas como medio de aproximar las distintas nacionalidades e identificar sus destinos, tanto por el intercambio de ideas y afectos, como por el de sus productos naturales e industriales.

La reciente inauguración del Canal de Panamá; el mejoramiento incesante de los principales puertos del continente situados sobre los oceános Atlántico y Pacífico y la unión de esos puertos por medio de líneas regulares de grandes vapores, son hechos que ensanchan el horizonte de la marina mercante y que sirven de estímulo para el estudio de los asuntos de carácter internacional que se relacionan con el tráfico marítimo, principalmente de aquéllos que influyen en el mejor aprovechamiento económico del instrumento destinado al trasporte de las personas y de las cosas.

En ese orden de ideas, consideramos oportuno hacer notar la necesidad de que los países marítimos convengan en adoptar un procedimiento uniforme para el arqueo de los buques mercantes, con el fin de reconocer mutuamente los certificados respectivos que expidan sus autoridades a los efectos de establecer el monto de los impuestos que graven al buque con relación a su tonelaje.

Es sabido que la mayor parte de los impuestos relativos al pasaje de los buques por aguas jurisdiccionales y a la entrada, permanencia y salida de los puertos, son regulados de ese modo y que tales impuestos están sujetos a la más severa fiscalización de parte de las autoridades encargadas de recaudarlos.

De ahí que se haya reconocido la importancia de poner a los buques en condiciones que les permitan constatar de un modo fehaciente, cuando las circunstancias lo requieran, su tonelaje, sin tener que someterse en cada caso a una nueva operación de arqueo que les origina gastos y demoras perjudiciales y de ahí también que en varias ocasiones se hayan proyectado convenciones análogas a la que indicamos.

Sin embargo, necesario es reconocer que el éxito no ha coronado los esfuerzos que se han hecho en ese sentido, pues si bien es cierto que las reglas propuestas por la comisión internacional de arqueo reunida en Constantinopla en el año 1873, sirven de base a los reglamentos de arqueo vigentes en la mayor parte de los países marítimos, no lo es menos que aun no se ha logrado el beneficio que podría obtenerse de esa uniformidad, sucediendo actualmente que un buque que se dedique al comercio marítimo mundial, debe poseer cuando menos, tres certificados de arqueo: uno expedido de acuerdo con el reglamento del país de su bandera y los otros dos expedidos de acuerdo con los reglamentos del Canal de Suez y del Canal de Panamá respectivamente.

Examinando esos reglamentos hemos podido apreciar que no sería difícil ponerlos de acuerdo, pues todos ellos adoptan el mismo procedimiento para calcular el volumen de los espacios que deben ser comprendidos en el tonelaje total, y solo difieren en detalles relativos á la determinación de esos espacios y de los descuentos que corresponde hacer para obtener el tonelaje neto o de registro.

Por lo expuesto, opinamos que el Congreso prestaría un señalado servicio a la marina mercante, si resolviera nombrar una comisión encargada de proponer las bases de un convenio internacional para el arqueo de buques a fin de someterlas a la aprobación de los países marítimos.

COMERCIO DEL URUGUAY.

Por PABLO FONTAINA,

Director de la Escuela Superior de Comercio del Uruguay.

RECURSOS Y OTRAS CONDICIONES LOCALES.

El Uruguay, es un país cuya poblacion es de un millión y medio de habitantes. Su movimiento demográfico ha sido el siguiente, hasta 1900, comparado con estas naciones:

Aumento vegetativo de las principales naciones.

[Quinquenio 1896–1900.]

	Proporción por 1,000 habts.
1. *Uruguay*	20. 7
2. Argentina	18. 0
3. Australia	17. 2
4. Servia	15. 3
5. Costa Rica	15. 1
6. Holanda	15. 0
7. Alemania	14. 7
8. Venezuela	14. 1
9. Dinamarca	13. 5
10. Rusia	12. 7
11. Rumania	12. 4
12. Inglaterra	11. 6
13. Italia	11. 0
14. Bélgica	10. 9
15. Suecia	10. 8
16. Suiza	10. 4
17. Japón	10. 2
18. Austria	9. 7
19. Estados Unidos	6. 3
20. España	5. 5
21. Chile	3. 4
22. Francia	1. 3
23. México	2. 1

Mortalidad en los principales paises.

[Quinquenio 1896–1900.]

	Proporción. por 1,000 habits.
1. México	35. 5
2. Rusia	34. 7
3. Chile	29. 8
4. España	29. 2
5. Rumania	26. 6
6. Servia	25. 0
7. Austria	24. 4
8. Costa Rica	24. 0
9. Italia	22. 9
10. Alemania	21. 3
11. Japón	20. 8
12. Francia	20. 6
13. Venezuela	18. 9
14. Suiza	18. 2
15. Bélgica	18. 1
16. Argentina	17. 9
17. Inglaterra	17. 7
18. Holanda	17. 2
19. Dinamarca	16. 4
20. Estados Unidos	16. 2
21. Suecia	16. 1
22. *Uruguay*	14. 6
23. Australia	12. 6

Natalidad en los principales paises.

[Quinquenio 1896–1900.]

	Proporción. por 1,000 habts.
1. Rusia	47. 4
2. Servia	40. 3
3. Costa Rica	39. 1
4. Rumania	39. 0
5. Alemania	36. 0
6. Argentina	35. 9
7. *Uruguay*	35. 3
8. España	34. 7
9. Austria	34. 1
10. Italia	33. 9
11. México	33. 4
12. Chile	33.2
13. Venezuela	33. 0
14. Holanda	32. 2
15. Japón	31. 0
16. Dinamarca	29. 9
17. Inglaterra	29. 3
18. Bélgica	29. 0
19. Suiza	28. 6
20. Suecia	26. 9
21. Estados Unidos	22. 5
22. Francia	21. 9

Su sistema de gobierno es republicano unitario y sus recursos son de un alto exponente.

Las condiciones de su suelo y su clima excepcional, merced a su situación geográfica, le brindan cada año grandes producciones derivadas de la industria agro-pecuria, que es la principal de las que se hallan diseminadas por el país.

La carne los cueros y la lana constituyen el principal factor de la producción natural de este país. Su activo comercio de exportación lo constituyen principalmente las negocios de esos dos productos.

En cuanto a la importación, ella ha promediado en los últimos diez años, a unos 40,000.000 de pesos oro uruguayo, procedentes de géneros para vestir, comestibles, materias primas, maquinarias, etc., estas últimas enviadas principalmente por los Estados Unidos de Norte América.

El promedio del valor de lo importado y exportado por el Uruguay, alcanzó durante el año 1915 a $108,270,310. De estos corresponden $34,979,639 a la importación y $73,290,671 a la exportación. Representan estas cifras un 32.31% para la importación y 67.69% para la exportación.

El sistema de comerciar en el país, es a base de facilidades en el pago de las compras y de las ventas.

Este sistema se ha arraigado en las costumbres y merced a él, el comercio mayor y menor se ha expandido por todos los ámbitos del país.

La sociabilidad en el país, corresponde tratarla a partir del enlace del elemento nacional con el extranjero. De éllos resultan la comunidad de propósitos en todas las actividades y la adaptación de las costumbres procedentes de todas las regiónes del globo. Puede concretarse este punto en estos términos: el Uruguay ha formado su sociabilidad y la sigue formando por la misma vía y por idénticos medios que los demás pueblos del nuevo continente, es decir, sigue el proceso de los organismos nuevos, influenciado en su desarrollo por los pueblos más viejos, con los cuales mantiene las más activas relaciones.

El costo de la vida está en relación conveniente con los salarios. El habitante llena holgadamente, con el producto de su trabajo, las exigencias de la vida material y, en cuanto a la vida moral, ella está altamente servida, con una amplísima libertad—dentro del respeto a las leyes—un confort adecuado, una vastísima ilustración en las clases altas y una instrucción muy difundida en las otras clases.

La Instrucción Pública absorbe una porción considerable del Presupuesto General de la Nación.

DESARROLLO DE LAS INDUSTRIAS DOMÉSTICAS.

El sistema establecido en el país, para la adaptación de las industrias extranjeras, es a base de facilidades concedidas a aquellas industrias que no existen en el país o que no tienen arraigo definitivo. De aquí que el sistema tenga un carácter mixto, muy acentuado.

Las colonizaciones se hacen a base de facilidades, ofrecidas al inmigrante: la introducción, libre de todo inpuesto, de sus prendas de uso, vestidos, muebles de servicio doméstico, instrumentos de labranza y herramientas y útiles de su oficio. Desembarco gratuito con todo su equipaje, y diligencias para la conveniente colocación en el trabajo de su preferencia. Son extensivas las disposiciones indicadas, a todos los miembros de la familia. La buena conductá y aptitud para el trabajo se acreditarán con un certificado gratuitamente expedido por al Agente Consular de la República en el puerto de embarque, y otorgado por alguna autoridad local de su domicilio, debidamente legalizado, siendo también gratuita la certificación consular.

Tanto sobre esta cuestión, como sobre las combinaciones industriales ensayadas, la experiencia va señalando resultados favorables en el campo de la explotación manteniendo el país, su régimen del sistema mixto, de que se ha hecho mención.

COMERCIO INTERNACIONAL ENTRE LOS PAÍSES AMERICANOS.

En otra parte de este Informe, se ha sentado la forma de intercambio de productos entre el Uruguay y el extranjero.

El crédito amplísimo, la gran confianza que su honesto comercio ha impuesto en los países europeos y la seriedad en su contrato, han abierto campo extenso a este intercambio, que ha resultado de una actividad superior a lo previsto.

Algunos de esos países europeos que mantenían activas relaciones desde que el Uruguay existía como nación independiente, han disminuido en sus transacciones por la tenaz y tendenciosa propaganda y facilidades concedidas por otros que procuraron ganarse el mercado al impulso de una concurrencia realizada a base de la exposición de grandes capitales invertidos en artículos manufacturados, que entregados al comercio mayor y menor del país, en condiciones de precio y plazos de pago insuperables, hicieron retroceder a los que durante muchos años habían sido únicos, no sólo en la venta de sus productos, sino en el intercambio.

A esta influencia puede asegurarse que no ha escapado ninguno de los países de la América del Sur.

El comercio con los Estados Unidos ha sido de poca importancia hasta hace poco tiempo, debido a la ignorancia en que éllos nos han tenido, a la falta de regulares vías de comunicación y al absoluto desconocimiento de los productos y de las condiciones en que éllos serían ofrecidos.

Algo, aunque en muy modesta escala, empieza a realizarse en el comercio de los Estados Unidos con el Uruguay. Sería conveniente que se estudiase en forma seria el régimen de comercio de cada uno de los dos países, para deducir el procedimiento a emplearse en el mutuo acercamiento del intercambio.

LA MEDIDA DE COMERCIO EXTERIOR.

Por la misma razón de no haberse estudiado el régimen comercial de cada uno de los países del Sur y Norte de América, falta la experiencia necesaria para poder fundamentar concretas opiniones que sirvan de ilustración al respecto.

Por de pronto y como una de las formas prácticas y expeditivas que pudieran ponerse en función para activar la aproximación de los pueblos, está la de este II Congreso Panamericano, cuyos resultados—sin duda alguna—han de ser altamente beneficiosos para el intercambio comercial Norte-Sud Americano.

Pero, además, hay otro medio (medio que resulta una aspiración). Es el de la celebración de un CONGRESO DE ENSEÑANZA COMERCIAL, para que, puestas de acuerdo las diferentes ESCUELAS SUPERIORES DE COMERCIO de América, resolviesen la implantación de los textos de enseñanza a utilizarse en esos Centros, en sustitución de los europeos, que son los que actualmente existen.

Hace falta que cada país escriba su Geografía Económica, para después confeccionar la del continente americano.

Hace falta que cada país escriba su texto de Economía Política, y su Historia Financiera para formar inmediatamente la Historia Continental de cada una de esas ciencias, a fin de poder estudiar los fenómenos que han influido en el desarrollo y en la vida económica y financiera de América.

Por esta vía científica se iría, a mi entender, rápidamente a la solución que se persigue con la celebración de estos Congresos.

La Escuela Superior de Comercio del Uruguay ya ha lanzado por vía de exploración, en algunos de los países del Sur, la idea de ese Congreso de ENSEÑANZA COMERCIAL CONTINENTAL, del carácter y de las tendencias de los varios celebrados en el continente europeo, cuyos resultados están por sobre toda ponderación.

ESTADÍSTICAS DE POBLACIÓN Y NAVEGACIÓN.

Por la Dirección General de Estadística de la República Oriental del Uruguay.

Población de la República en 31 de diciembre, 1914.

Departamentos.	Población en 31 de diciembre de 1913.	Crecimiento en 1914.			Población en 31 de diciembre de 1914.	Superficie K. C.	Densidad habitantes por K. C.
		Vegetativo.	Migratorio.	Total.			
Montevideo	359,526	4,109	[1] 708	4,817	364,343	664	548.71
Artigas	35,151	644	545	1,189	36,340	11,378	3.19
Canelones	104,391	2,598	79	2,677	107,068	4,752	[illegible]
Cerro Largo	52,794	1,076	135	1,211	54,005	14,929	3.62
Colonia	71,512	1,693	1,253	2,946	74,458	5,682	13.10
Durazno	50,690	968	79	1,047	51,737	14,315	3.61
Flores	21,161	322	79	401	21,562	4,519	4.77
Florida	55,432	1,406	79	1,485	56,917	12,107	4.70
Maldonado	36,306	742	77	819	37,125	4,111	9.03
Minas	61,479	1,362	79	1,441	62,920	12,485	5.04
Paysandú	57,146	895	2,471	3,366	60,512	13,252	4.57
Río Negro	31,907	582	1,040	1,622	33,529	8,471	3.96
Rivera	42,503	760	79	839	43,342	9,829	4.41
Rocha	42,351	879	79	958	43,309	11,089	3.91
Salto	60,175	1,019	5,299	6,318	66,493	12,603	5.28
San José	55,673	1,260	78	1,338	57,011	6,963	8.19
Soriano	49,593	996	824	1,820	51,413	9,224	5.57
Tacuarembó	55,285	1,075	78	1,153	56,438	21,015	2.69
Treinta y Tres	36,284	835	73	908	37,192	9,539	3.90
Los departamentos	919,833	19,112	[2] 12,426	31,538	951,371	186,262	5.11
La República	1,279,359	23,221	13,134	36,355	1,315,714	186,926	7.04

[1] El crecimiento migratorio exterior por el puerto de Montevideo, fué de 2,125 asignándosele como efectivo la tercera parte (708).

[2] El crecimiento migratorio exterior por los puertos de "Los Departamentos" fué de 11,009 agregándosele 1,417 del excedente de Montevideo que figuran repartidos por partes iguales entre los 18 departamentos.

Movimiento de pasajeros de la navegación exterior por meses.

Meses.	Año 1913.			Año 1914.			Año 1915.		
	Inmigración.	Emigración.	Crecimiento.	Inmigración.	Emigración.	Crecimiento.	Inmigración.	Emigración.	Crecimiento.
Enero	28,829	20,061	8,768	33,242	27,941	5,301	20,562	16,605	3,957
Febrero	27,155	24,051	3,104	33,552	32,039	1,513	21,349	21,269	80
Marzo	22,270	23,151	−881	28,085	32,543	−4,458	20,014	21,698	−1,684
Abril	19,191	17,895	1,296	28,097	27,859	238	18,151	17,714	437
Mayo	19,034	18,513	521	26,089	24,047	2,042	18,518	17,956	562
Junio	19,249	16,999	2,250	24,920	21,826	3,094	16,430	15,103	1,327
Julio	20,037	18,098	1,939	22,484	20,707	1,777	17,305	16,292	1,013
Agosto	18,743	17,593	1,150	14,499	13,441	1,058	15,981	14,982	999
Septiembre	18,766	16,539	2,227	11,382	10,629	753	13,558	13,013	545
Octubre	20,038	18,076	1,962	12,129	11,131	998	....	....	....
Noviembre	20,895	18,558	2,337	13,306	13,534	−228	....	....	....
Diciembre	26,941	23,110	3,831	16,447	15,401	1,046	....	....	....
Total	261,148	232,644	28,504	264,232	251,098	13,134	....	....	....

Movimiento general de la navegación exterior en la República, por puertos, 1914.

ENTRADA.

Puertos.	Vapores.					
	Cargados y en lastre.			Cargados.		
	Número.	Tons.	Trip.	Número.	Tons.	Trip.
Montevideo	3,599	9,055,393	256,767	3,490	8,881,341	252,568
Demás puertos de la República	5,155	2,107,126	123,947	346	280,503	13,695
Total	8,754	11,162,519	380,714	3,836	9,161,844	266,263

SALIDA.

Puertos.	Número.	Tons.	Trip.	Número.	Tons.	Trip.
Montevideo	3,581	9,048,981	257,079	3,413	8,718,298	250,492
Demás puertos de la República	5,095	2,073,496	122,748	1,429	516,901	22,235
Total	8,676	11,122,477	379,827	4,842	9,235,199	272,727

ENTRADA.

Puertos.	Veleros.					
	Cargados y en lastre.			Cargados.		
	Número.	Tons.	Trip.	Número.	Tons.	Trip.
Montevideo	161	104,916	1,686	145	100,619	1,568
Demás puertos de la República	4,737	823,642	29,337	451	49,183	2,034
Total	4,898	928,558	31,023	596	149,802	3,602

SALIDA.

Puertos.	Número.	Tons.	Trip.	Número.	Tons.	Trip.
Montevideo	173	92,189	1,577	86	43,184	770
Demás puertos de la República	4,679	820,705	28,979	4,350	793,182	27,746
Total	4,852	912,894	30,556	4,436	836,366	28,516

ENTRADA.

Puertos.	Buques.					
	Cargados y en lastre.			Cargados.		
	Número.	Tons.	Trip.	Número.	Tons.	Trip.
Montevideo	3,760	9,160,309	258,453	3,635	8,981,960	254,136
Demás puertos de la República	9,892	2,930,768	153,284	797	329,686	15,729
Total	13,652	12,091,077	411,737	4,432	9,311,646	269,865

SALIDA.

Puertos.	Número.	Tons.	Trip.	Número.	Tons.	Trip.
Montevideo	3,754	9,141,170	258,656	3,499	8,761,482	251,262
Demás puertos de la República	9,774	2,894,201	151,727	5,779	1,310,083	49,981
Total	13,528	12,035,371	410,383	9,278	10,071,565	301,243

Movimiento general de la navegación exterior en la República, por banderas, 1914.

ENTRADA.

Banderas.	Vapores.					
	Cargados y en lastre.			Cargados.		
	N°.	Tons.	Trip.	N°.	Tons.	Trip.
Uruguaya	923	32,220	3,488	54	17,621	935
Alemana	306	1,229,021	29,948	295	1,195,728	28,933
Argentina	5,469	3,359,228	186,745	1,510	1,540,167	78,644
Austro-Húngara	50	160,442	4,499	48	154,688	4,422
Belga	18	38,687	528	17	38,305	517
Brasileña	116	97,021	5,901	111	94,287	5,833
Chilena	3	3,145	124	2	3,074	112
Danesa	6	9,631	125	4	8,309	93
Española	93	356,305	14,592	93	356,305	14,592
Francesa	187	696,503	19,299	184	683,752	18,834
Griega	7	14,399	182	4	8,033	104
Holandesa	109	392,618	11,409	96	377,432	11,140
Inglesa	1,260	4,241,824	86,487	1,228	4,166,757	85,151
Italiana	117	368,507	14,175	117	368,507	14,175
Norte americana	3	7,052	128	3	7,052	128
Noruega	61	101,283	2,256	45	89,336	1,852
Rusa	6	11,431	158	6	11,431	158
Sueca	20	43,202	670	19	41,060	640
Total	8,754	11,162,519	380,714	3,836	9,161,844	266,263

Banderas.	Veleros.					
	Cargados y en lastre.			Cargados.		
	N°.	Tons.	Trip.	N°.	Tons.	Trip.
Uruguaya	249	17,052	866	203	13,154	715
Alemana	1	212	7	1	212	7
Argentina	4,500	803,675	28,531	277	32,456	1,392
Boliviana	8	288	26	8	288	[illegible]
Brasileña	51	1,118	152	23	715	80
Danesa	3	1,388	32	2	1,100	24
Francesa	6	13,630	161	6	13,630	161
Inglesa	4	6,904	77	4	6,904	77
Italiana	28	28,795	431	28	28,795	431
Norte americana	1	813	9	.....	.....	.....
Noruega	42	51,679	676	40	49,928	[illegible]
Paraguaya	1	115	5	1	115	5
Rusa	1	1,191	15	1	1,191	15
Sueca	3	1,698	35	2	1,314	25
Total	4,898	928,558	31,023	596	149,802	3,602

Banderas.	Buques.					
	Cargados y en lastre.			Cargados.		
	N°.	Tons.	Trip.	N°.	Tons.	Trip.
Uruguaya	1,172	49,272	4,354	257	30,775	1,650
Alemana	307	1,229,233	29,955	296	1,195,940	28,940
Argentina	9,969	4,162,903	215,276	1,787	1,572,623	80,036
Austro-Húngara	50	160,442	4,499	48	154,688	4,422
Belga	18	38,687	528	17	38,305	517
Boliviana	8	288	26	8	288	26
Brasileña	167	98,139	6,053	134	95,002	5,913
Chilena	3	3,145	124	2	3,074	112
Danesa	9	11,019	157	6	9,409	117
Española	93	356,305	14,592	93	356,305	14,592
Francesa	193	710,133	19,460	190	697,382	18,995
Griega	7	14,399	182	4	8,033	104
Holandesa	109	392,618	11,409	96	377,432	11,140
Inglesa	1,264	4,248,728	86,564	1,232	4,173,661	85,228
Italiana	145	397,302	14,606	145	397,302	14,606
Norte americana	4	7,865	137	3	7,052	128
Noruega	103	152,962	2,932	85	139,264	2,496
Paraguaya	1	115	5	1	115	5
Rusa	7	12,622	173	7	12,622	173
Sueca	23	44,900	705	21	42,374	665
Total	13,652	12,091,077	411,737	4,432	9,311,646	269,865

***Movimiento general de la navegación exterior en la República, por banderas, 1914*—Continuación.**

SALIDA.

Banderas.	Vapores.					
	Cargados y en lastre.			Cargados.		
	Nº.	Tons.	Trip.	Nº.	Tons.	Trip.
Uruguaya	928	29,085	3,301	51	16,911	875
Alemana	298	1,210,765	29,738	285	1,158,356	28,173
Argentina	5,385	3,318,240	184,928	2,579	1,780,573	86,601
Austro-Húngara	50	166,350	4,214	50	166,350	4,214
Belga	18	38,707	548	17	38,325	537
Brasileña	121	99,116	6,405	114	97,347	6,264
Chilena	3	3,145	124	2	3,074	112
Danesa	4	8,074	96	3	8,023	84
Española	93	355,399	14,580	90	348,492	14,489
Francesa	187	692,640	19,330	184	679,836	18,851
Griega	8	16,196	272	6	12,036	219
Holandesa	110	382,292	11,167	99	364,818	10,903
Inglesa	1,263	4,267,306	87,375	1,178	4,057,679	84,640
Italiana	118	368,668	14,541	114	358,456	14,234
Norte americana	3	7,052	128	3	7,052	128
Noruega	61	103,782	2,256	40	85,839	1,633
Rusa	7	14,476	187	7	14,476	187
Sueca	19	41,184	637	17	37,556	583
Total	8,676	11,122,477	379,827	4,842	9,235,199	272,727

Banderas.	Veleros.					
	Cargados y en lastre.			Cargados.		
	Nº.	Tons.	Trip.	Nº.	Tons.	Trip.
Uruguaya	249	17,323	821	86	7,620	325
Argentina	4,468	800,707	28,331	4,265	785,831	27,461
Boliviana	8	288	25	7	252	22
Brasileña	44	795	124	35	685	104
Danesa	3	1,125	29	3	1,125	29
Francesa	3	6,177	71	2	4,233	47
Inglesa	4	7,003	83	2	2,368	24
Italiana	21	21,232	310	12	10,688	164
Norte americana	2	1,616	20	2	1,616	20
Noruega	43	54,469	685	17	20,016	273
Paraguaya	4	460	22	2	233	12
Sueca	3	1,699	35	3	1,699	35
Total	4,852	912,894	30,556	4,436	836,366	28,516

Banderas.	Buques.					
	Cargados y en lastre.			Cargados.		
	Nº.	Tons.	Trip.	Nº.	Tons.	Trip.
Uruguaya	1,177	46,408	4,122	140	24,531	1,200
Alemana	298	1,210,765	29,738	285	1,158,356	28,173
Argentina	9,853	4,118,947	213,259	6,844	2,566,404	114,062
Austro-Húngara	50	166,350	4,214	50	166,350	4,214
Belga	18	38,707	548	17	38,325	537
Boliviana	8	288	25	7	252	22
Brasileña	165	99,911	6,529	149	98,032	6,368
Chilena	3	3,145	124	2	3,074	112
Danesa	7	9,199	125	6	9,148	113
Española	93	355,399	14,580	90	348,492	14,489
Francesa	190	698,817	19,401	186	684,069	18,898
Griega	8	16,196	272	6	12,036	219
Holandesa	110	382,292	11,167	99	364,818	10,903
Inglesa	1,267	4,274,309	87,458	1,180	4,060,047	84,664
Italiana	139	389,900	14,851	126	369,144	14,398
Norte americana	5	8,668	148	5	8,668	148
Noruega	104	158,251	2,941	57	105,855	1,906
Paraguaya	4	460	22	2	233	12
Rusa	7	14,476	187	7	14,476	187
Sueca	22	42,883	672	20	39,255	618
Total	13,528	12,035,371	410,383	9,278	10,071,565	301,243

EL RÉGIMEN ADUANERO DEL URUGUAY.

Por A. IDIARTEGARAY,
Director General de Aduanas de Uruguay.

El régimen aduanero del Uruguay puesto en práctica en la República no tiene determinación expresa, puede considerarse bajo estas fases: Económico, protector o industrial. Fiscal o financiero. Desde el año 1888 empieza a contemplar las industrías, protegiéndolas, fijando derechos de importación prohibitivos a los artículos similares extranjeros.

Forzosamente nuestro sistema aduanero ha fluctuado a medida que las necesidades de la Nación han crecido. Los derechos que gravan los artículos de importación son en general impositivos, cobrándose de acuerdo con las disposiciones contenidas en la Tarifa de Avalúos vigente y de conformidad con la ley de 5 de Enero de 1888.

Toda mercadería procedente del extranjero introducida para consumo, paga en general a su importación el derecho de 31% sobre su avaluación.

Existen además los derechos siguientes:

51%—Armas, pólvoras, municiones, rapé, perfumerías, etc.

48%—Confecciones.

44%—Galletitas, masas de todas clases, chocolates, fideos, etc.

20%—Maderas, hierro, cobre, bronce en lingotes, zinc en láminas, carbón vegetal, frutas frescas, azogue, estaño, etc.

12%—Papas de todas clases, aún aquellas que se introducen para semillas.

8%—Máquinas o prensas tipográficas o litográficas, tipos para imprenta, papel blanco para imprimir, semillas de flores etc.

6%—Mapas y globos geográficos y los aparatos destinados al estudio de las ciencias naturales, físicas y matemáticas, etc.

Todos estos derechos sufren el recargo siguiente:

5%—Derecho adicional—Ley 4 de octubre de 1890.

3%—De Patente adicional—Creada por Ley 7 de noviembre de 1899 para la construcción del Puerto de Montevideo.

1½% de Patente de Giro—Ley 5 de diciembre de 1906.

½% de Patente Consular—Ley 20 de noviembre de 1906.

3½% de Impuesto de estadística—Ley 17 de septiembre de 1914.

5% de Impuesto extraordinario—Ley 11 de mayo de 1915.

Este último impuesto se aplica a todas las mercaderías cuyos derechos pasan del 8%.

La industria nacional está amparada por distintas leyes, siendo la más amplia y que refunde todas, la que fué dictada en 12 de octubre de 1912.

Dado pues, nuestro característico sistema aduanero y su diversidad en la aplicación de los impuestos, puede manifestarse, en resumen, que tiende exclusivamente a procurar lo más que sea posible los recursos necesarios para cubrir en su mayor parte el presupuesto general de gastos, atendiendo solamente en su progresión relativa a las industrias nacionales mediante el aumento, hasta ser prohibitivo, del derecho correspondiente sobre el artículo similar extranjero. En consecuencia, no existen derechos diferenciales, ni por lo tanto tratados de comercio recíprocos en beneficio de determinados productos extranjeros. Teniendo esto, por lo demás, una lógica explicación beneficiosa para la República, la cual consiste en que siendo nuestro país esencialmente ganadero es mayor la demanda que la oferta de sus productos, no viéndose por lo tanto en la necesidad de celebrar tratados de comercio.

CRÉDITO Y BANCOS.

Por ALEJANDRO TÁLICE,
Director del Banco Italiano del Uruguay.

Es indudable que el crédito es la palanca principal del comercio. Conceder al comerciante capitales y tiempo necesario para colocar las mercaderías que importa del extranjero, recibir su importe y remitirlo después a su acreedor; facilitar al industrial los medios pecuniarios indispensables para la implantación de su industria; conceder a los grandes constructores de ferrocarriles, de edificios, de buques de transportes para poner en explotación y rendimiento sus esfuerzos, es, en tesis general, propender al fomento de la riqueza pública de las naciones. Entre los capitalistas que más se han distinguido en la concesión de créditos, previa comprobación de la seriedad, honradez, modo de trabajar etc. etc. de sus futuros clientes, los alemanes llevan, sin duda alguna, el primer puesto. Es con este criterio que han conseguido penetrar con sus industrias y su comercio en todas las regiones del orbe y en las mismas capitales de las naciones más ricas y más industriales del mundo. Se ha visto últimamente que París y Londres, que las principales ciudades de los Estados Unidos, que muchas de Rusia, Italia y de toda la América Latina, sin excluir el Oriente y el Extremo Oriente, son invadidas por la banca, el comercio y la industria alemanes.

Es cierto que la liberalidad en conceder créditos, expone a quien los otorga, a pérdidas frecuentes y considerables, pero los germanos dicen y opinan, que el monto de las ganancias compensa con creces todas las pérdidas que se sufren y que por otra parte se cuidan de evitar.

¿Existe un modo mejor para el mejor y mayor desarrollo del comercio internacional? Si en el mundo cesara la concurrencia, si todo el movimiento del intercambio universal estuviera en manos de los respectivos trust, los cuales impondrían además de los precios, las condiciones del crédito y las formas de pago, se evitarían naturalmente, sino todas, casi todas las quiebras y las pérdidas consiguientes. Desde que estalló el actual conflicto mundial, casi todas las transacciones se hacen sobre la base de créditos abiertos telegráficamente, contra pago de las mercaderías que se exportan, anulando por completo los riesgos de los malos negocios de la clientela y de las insolvencias.

Pero este modo de regular el intercambio, no es otra cosa que el monopolio ejercitado en todas las esferas del trabajo y de la actividad humana en perjuicio del consumidor, quien debe soportar todas las exigencias de los monopolizadores, creando su propia pobreza y ruina. Y el consumidor es el mundo entero.

Los Bancos con sus propias ramificaciones o con la intervención de sus grandes corresponsales, resultaron utilísimos intermediarios, sea para aminorar los riesgos del crédito fácil, sea para modificar las pretensiones exorbitantes de los grandes monopolios. Con completo conocimiento del exportador de allende los mares y de los comerciantes e industriales de este continente, han podido contribuir a las liberalidades del crédito, acompañadas de la prudencia necesaria e indispensable en estas operaciones y el intercambio se encontró facilitado con grandes resultados favorables para las naciones ligadas entre sí por las relaciones de intercambio de sus respectivos productos.

En esta parte de la actividad de los pueblos creo que se ha alcanzado una relativa perfección y salvo detalles que se van perfeccionando cada día más, a medida de las lecciones que sugiere la experiencia, es de creerse que pocas modificaciones puedan sugerirse.

Se dice que el sud-americano prefiere comprar donde puede obtener condiciones más favorables para el pago. Es de suponerse que todos los hombres

prefieren en sus transacciones tratar con quien ofrece las mejores condiciones de precio y mayores facilidades de pago. Estas facilidades pueden ser de distinta naturaleza: mayor descuento a quien paga de contado, mayor plazo a quien no puede o prefiere pagar después de realizadas sus transacciones. Por eso todo el que negocia trata de comprar al mejor precio la mejor mercadería, obedeciendo todas las relaciones comerciales a las reglas inmutables de la oferta y de la demanda.

Las grandes transacciones de importación y exportación se operan hoy casi totalmente de la siguiente manera: el importador de ultramar que importa productos americanos de la ganadería, de la agricultura, de la industria o de la mineralogía, abre créditos a su cliente sud-americano sobre los principales Bancos de ultraocéano, que los confirman a sus Sucursales o a los Bancos corresponsales de este Continente, los cuales facilitan al exportador los capitales necesarios contra entrega de los documentos de embarque, que el Banco pagador remite a sus casas o Corresponsales, para su reembolso.

Viceversa, los comerciantes sud-americanos, que necesitan grandes cantidades de artículos del otro hemisferio, se presentan a los Bancos locales, los que les abren los créditos necesarios en los Estados Unidos, en Europa, en Asia etc. a favor de aquellos exportadores, por medio de sus Sucursales o Corresponsales, los que pagan las mercaderías expedidas y remiten los documentos de embarque a estos Bancos, quienes los entregan a los importadores contra pago de los importes respectivos.

Este método, en el uso del crédito, podría considerarse como ideal, puesto que elimina casi por completo todos los riesgos del crédito, anula los abusos del crédito mismo y hace imposibles las crisis comerciales, porque pagándose por una y otra parte a pronta caja impide los excesos de la oferta, el abarrotamiento de las existencias, las ventas forzadas, los fiados excesivos, todo lo que acercándose las crisis económicas, producto de las grandes aglomeraciones de mercaderías que no encuentran colocación, produce las ruinas comerciales que paralizan por tiempo indeterminado las actividades de muchas naciones.

En resumen, puede deducirse que todos los sistemas tienen algo de defectuoso, sea el que favorece demasiado las expansiones del intercambio, sin el contrapeso de las precauciones necesarias, sea el que impide el desarrollo de las actividades de los pueblos con las restricciones del crédito; y que el verdadero método es el que contempla los inconvenientes y las ventajas de uno y otro. Siempre es maestro de experiencia el adagio latino "in medio stat virtus."

Entre las Instituciones locales de la Capital del Uruguay que hacen operaciones de crédito para la importación y exportación, cuéntase en primera fila el Banco de la República con sus grandes medios de acción, los prestigiados cuatro Bancos ingleses, el Banco Alemán Transatlántico, el Banco Español del Río de la Plata, el Banco Comercial y el Italiano del Uruguay y por último la Sucursal del gran Banco Norte-Americano recientemente establecida en Montevideo, el National City Bank of New York.

Un tipo común de moneda.—El sistema métrico decimal ha resuelto en la Unión latina no solamente el problema del *tipo común de moneda* sino de medidas, de peso, de cálculos. Sin embargo, en las demás naciones, sea por arraigo de costumbres seculares, sea porqué es difícil amoldar los pueblos separados por distancias y tradiciones, a comunes usos de idiomas y de prácticas comerciales, ha continuado reinando en cada una su sistema monetario antiguo, etc. habiendo resultado vanos todos los esfuerzos para inducir a las naciones del viejo continente a plegarse a todas las ventajas que presenta el sistema métrico decimal.

Las Repúblicas Sud-americanas, las del Centro y Norte America podrían fácilmente concertarse para adoptar el sistema decimal de la moneda única,

extendiéndolo también al único tipo de pesas y medidas; y no hay duda que esta reforma facilitaría poderosamente las transacciones e intercambio entre ellas.

NECESIDAD DE REFORMAR LAS LEYES IMPOSITIVAS RELACIONÁNDOLAS CON EL CATASTRO EN LA POLÍTICA ECONÓMICA Y FINANCIERA DE LOS PUEBLOS.

Por ANTONIO F. SOLARI,
Agrimensor Nacional de Argentina.

Hoy por hoy Centro y Sud América en especial, se hallan económicamente regulados por sistemas tributarios antiquísimos, que perjudican el fácil desenvolvimiento y la prosperidad de los estados que los componen.

Se han implantado impuestos calcándolos de la vieja Europa, sin tener en cuenta la enorme diferencia del ambiente; y más aún de la producción innata de los países jóvenes, así como la densidad de su población con los medios de vida inherentes a los mismos.

Se pusieron trabas a las industrias a las energías humanas, cuando por el contrario era necesario ayudarlas, darles vuelo para que ellas cumpliendo su misión transformaran la materia prima en las necesidades múltiples de la existencia. Se fué más lejos; se encadenaron unos productos para que algunos congéneres vivieran en beneficio particular, se protegieron malas imitaciones, eliminándoles competencia leal, creyéndose fomentar en el país robustos transplantes, que fueron solamente raquíticos arbustos, generados en malas condiciones desde su nacimiento.

Por estas causas se sufre un general estancamiento, sin ideales propios, esperando que todo se haga de por sí, nuestros grandes financieros sólo buscan calmantes en los momentos graves, no queriendo acometer una verdadera operación quirúrgica sobre el cuerpo enfermo que vive del oxígeno que le brinda la potente naturaleza. Nuestro mal es profundo y día a día con las necesidades imperiosas de los gobiernos se vuelve crónico, sufriendo todos el falso andamiaje sobre el que se apoya su existencia y contribuyendo a que más tarde la operación sea más dolorosa, más erizada de dificultades y peligros.

Una evolución es inprescindible, para que los estudios financieros se conviertan en ciencias exactas, para que la enorme riqueza que encierran todos los estados de este continente pueda movilizarse, pueda extraerse de las entrañas de la madre tierra; y para ello es necesario que toda la América sea libre, completamente libre, como los derechos del hombre que amparan nuestras leyes. Hoy nos falta una constitución económica, una ley sabia que aporte a la vida de los pueblos, a más del bienestar social ya obtenido, la amplia libertad para luchar, para desenvolverse. Que no se multen nuestras energías; que no se opongan trabas al capital, a las industrias, al trabajo; queremos las puertas abiertas a todos los pueblos, a la República entera en todas sus fronteras, y veréis como cual colmena en rico panal caerán las laboriosas abejas para transformar en rica miel, el suma, la savia de nuestra tierra.

Bienvenido sea el oro que fecunde con sus iniciativas nuestro suelo; bienvenido el fuerte brazo que con su labor arranque de las entrañas de la tierra los frutos que madre-naturaleza brinda a todos.

Dejemos libre al pensamiento a sus múltiples actividades, que vuelen en fantasías ó quimeras, o se dejen atrastrar por su potente inteligencia hasta los lindes de lo imposible! dejémosle libres, sin cargos, pues su fruto infalible será una legión de industriosos, de intelectuales, de trabajadores.

Debemos, los países jóvenes, estudiar entusiastas todas las anacrónicas leyes que invaden día a día el tesoro privado y sacrosanto de los hombres—el trabajo—tratando de profundizar los métodos impositivos que sin razón alguna de ser, cual leyes de emergencia, nacen, para saldar un déficit o levantar una letra.

Nada hay en nuestro país que pueda guiar financieramente su economía; falta un rumbo, una verdadera orientación para implantar una línea de conducta a seguir. Los presupuestos continuamente con déficit, retrotraen las energías indispensables al buen gobierno, produciéndose un estancamiento de la vitalidad en las esferas oficiales, amenguadas por suerte, por el desarrollo innato, por la savia de nuestras inmensas praderas.

Nuestros hombres de estado, guiados tal vez por falsos conceptos, consideraron como fuentes de recursos todas aquellas materias susceptibles de tener siempre un *valor en movimiento, inestable*, ó mejor dicho, que aparecía a nuestra vista, palpable en cada manifestación de la vida, despreocupando renglones verdaderamente imponibles, los cuales a su vez y algunos solamente aparecieron cuando fueron muy visibles, dejando, sin embargo ,de ir al fondo y analizar el orígen de todo aquel conglomerado, al tronco cuyas ramas eran una a una podada por los impuestos.

Nada mas fácil que buscar la implantación de sabias leyes donde en realidad existieran las verdaderas fuentes de recursos, cuya oscilación jamás pudieran perjudicar a la comunidad, aportando de la misma su prosperidad relacionada en escala ascendente al aumento de la población como factor primordial en todo país de inmigración.

Sólo fuertes sacudidas al sistema rentístico imperante en nuestro país y a su bienestar, pudieran sacarlo aunque no en gran escala, de su idiosincracia, lo que hace un hecho de uno de nuestros dichos criollos, *no hay mal que por bien no venga.* En efecto: en el año 1880, los recursos del principal estado que forma la República Argentina, la Provincia de Buenos Aires, con más de 30 millones de hectáreas todas fértiles, eran equilibradas por las rentas, (no de buen gobierno), que producía el célebre Banco de la Provincia y el Ferrocarril Oeste, más vinieron las hecatombes del 90 y fué necesario arbitrar fondos, costaran lo que costaran, iniciándose una era llena de gabelas, impuestos, etc. la mayor parte injustos, destacándose por buena suerte una entre ellos que se refería en especial a la tierra, llamada *contribución directa*, que a pesar de existir, no se le tenía mayormente en cuenta, por las causas apuntadas anteriormente. Lamentable ha sido en toda forma la percepción de este impuesto y mucho más aún, cuando las influencias políticas primaban sobre todas las cosas y también porque era imposible tener una noción clara de la propiedad en sus vastísimas extensiones y regular en toda forma esta contribución; su capacidad fué insignificante para que pudiera encontrarse en esa ley la clave financiera del buen gobierno económico de un pueblo, especialmente americano.

Por esta causa se fueron aumentando las tasas en otros renglones hasta llegar en algunas a 7 millones de pesos papel argentino aplicado en la actualidad a la justicia del estado de Buenos Aires con dos millones y medio de habitantes. Sin embargo en los umbrales de la nueva crisis, de la crisis que tuvo nuestro país con la super-valorización de la propiedad, en su especulación, se trató de recoger el mayor fruto posible de la única fuente de recursos que aún casi permanecía intacta, la *contribución directa*, ya nombrada.

Solo este paso dado en la Provincia de Buenos Aires el año 1914, produjo $19,176,000 m/n. o sean 8,130,624 dólares en un presupuesto total de $56,204,000 m/n. o sean 23,830,496 dólares, lo que nos representa un 34% de los gastos generales.

Y esto, que la tasa de 5% fué insignificante comparada con el valor de la tierra, o mejor dicho, con su renta, y también debido a la forma nada edificante del método empleado, usado en muchos países y que no responde a una verdadera exactitud, como lo demostraremos más adelante.

La fracción socialista de la Legislatura del Estado de Buenos Aires calculó con solo 150 propiedades en un conjunto aproximado de 2650 de más de 2000 hects. c/u., una tasa media de renta de 6, 11%, con lo cual se aportaría una contribución al gobierno de la Provincia de $33.400.000 m/n. o sean 14.161.600 dólares; esto es con la valuación practicada hoy en día sin estar contraloreada por mensuras y planos registradores, ateniéndose a las declaraciones de superficies de los mismos interesados, por falta de un buen plano catastral al igual de los que poseen Francia, Alemania y otros países.—Yéndose más al fondo de la cuestión, los socialistas en sus cálculos al mayor valor aportan otros $53,000,000 m/n. o sean 22,472,000 dólares, con lo cual se llega a un total de $86,400,000 m/o. o sean 36,633,600 dólares imponibles solamente sobre la tierra dándonos un espléndido superávit de más de $30,000,000 m/n. o sean 12,720,000 dólares, en una sola de las 14 provincias que forman la Confederación Argentina.

Como vemos actualmente las fuentes de recursos no se hallan bien calculadas, para compensar el 66% se ha echado mano de otros medios, buscándose materia imponible en primer lugar como decíamos, a la justicia con el papel sellado que produce 7 millones de pesos papel argentino, luego al comercio o industrias 3 millones.[1] bebidas y alcoholes 3 millones, patentes en general 1 1/5. millones, a las sucesiones 1 millón, recursos para construcción y conservación de caminos 1 millón de pesos; y otros de leyes especiales que equilibran como una verdadera retribución de servicios, no obstante abonarlos la colectividad en conjunto.

En estos renglones podría muy bien aunarse el impuesto de caminos con el de la producción y recargarlo uniformemente en la contribución territorial como único impuesto, quedando por lo tanto los otros renglones que deben ser forzosamente materia de estudio y de eliminación paulatina. Sin embargo esto no es todo, pues también debemos anotar las leyes impositivas que dimanan de los municipios, las que alcanzan también a un porcentaje enorme. Estos múltiples impuestos son una traba grandísima para el fácil desarrollo de las actividades, coartando el impulso que como fuerza viva nos lleva siempre adelante a pesar de todo.

Si la tierra produjera en realidad lo que debe producir, sea esto el 6 o el 8% de renta, menos mal, desde luego contaríamos con superavits en los presupuestos, pero desgraciadamente no es así; a medida que nos acercamos a los vastos campos, la renta disminuye considerablemente y siempre en relación inversa a la extensión de la propiedad, el cultivo intensivo no existe y el impuesto a la producción desaparece, de manera que solo perjudica a los pequeños hacendados, a las estancias limitadas.

Como otros países, adolecemos del mismo mal, el latifundio, los grandes campos que están en manos de los grandes terratenientes, los que contando con enormes extensiones de tierra se contentan con sacar de las mismas una renta que las más de las veces no alcanza ni al 2%, y en la mayoría de los casos su vida de lujo y desidia los lleva a malgastar en el extranjero el patrimonio que no produce ni para el Estado.—Permaneciendo inactivas sus tierras y sus campos, recae en nosotros un evidente estancamiento, puesto que aquellos son un pedazo del suelo de la nación que perjudica a la colectividad, a los habitantes del país.

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[1] Una cristalería con un capital en giro de $1,200,000 m/n. al año pagó de impuestos $6,000 m/n habiendo obtenido en total un beneficio de $14,000 m/n año 1914.

En la actualidad el Estado de Buenos Aires cuenta con 1860 propiedades de más de mil hectáreas cada una y unas 300 de más de diez mil hectáreas.—Un solo estanciero en el partido de Guaucini con cien mil hectáreas no llega ni llegaba a sacar el 1 % de renta de su propiedad explotada personalmente.

Así se halla en la mayoría de los casos toda la República en sus 300 millones de hectáreas y es necesario por lo tanto propender a la eliminación del latifundio pues los efectos y las causas están ligadas íntimamente: las leyes son consecuencias lógicas de los males que afligen a la comunidad.

Cambiemos el sistema impositivo actual, hagamos recaer las cargas públicas con justicia, tanto sobre el que trabaja como sobre el que no lo hace, uniformemos más el criterio a nuestras observaciones, pues nuestros jóvenes países están supeditados a lo que les da vida y vigor: la tierra.

¿Cómo no va a soportar ésta, toda la débil carga de unos presupuestos ínfimos?

Veámos un ejemplo: sobre los 30 millones de hectáreas del Estado de Buenos Aires descansan mas de 11.000 Kms. de vías férreas, habiéndose invertido con obras de la misma índole y en conjunto más de 2.200 millones de francos; luego si las compañías reditúan del 4 al 6 % como interés de ese capital, más la conservación del material etc. etc. que *recae sólo sobre las zonas productoras*, o en explotación ¿cómo no obtener enormes entradas, cuando esas empresas se llevan un beneficio de cerca de 100 millones de francos anualmente de un solo Estado?—y eso en la actualidad, pero en el mañana cuando por necesidad se haga producir a la tierra el interés verdadero, o mejor dicho, la renta real que debe surgir de sus entrañas, entonces. . . .

De todas maneras debemos propiciar el cambio radical tanto en la percepción de los impuestos como en su aplicación.

Creemos, conociendo las necesidades de nuestros jóvenes países, que una reforma unitaria sería la más lógica, pero una reforma que se aproximara más a los programas doctrinarios de Marx, o a los últimos tratadistas u hombres de finanzas que nos ha dado la Alemania moderna—sería necesario buscar un impuesto absoluto, un impuesto a la tierra, a su *mayor valor*, en el que se englobara la renta, pero un mayor valor *no socialista*, cuyo arranque nace de un punto arbitrario para llegar al definitivo, sino un *mayor valor* desde su origen, es decir, desde el valor *cero o nulo* de la propiedad hasta el que actualmente tiene por intermedio del esfuerzo de la colectividad.

Necesariamente nos aproximamos a la práctica de las doctrinas georgistas, sustentadas por el apóstol de San Francisco de California; si a ella llegáremos, sea en hora buena, las Vancouvers Sud-Americanas lucirán sus galardones de grandes ciudades y las agrestes campiñas se convertirán en campos de oro, almacenando en reservas inmensas, los productos que son el alimento y la vida de las poblaciones.

Al recordar a Henry George y apoyar en mucho sus ideas, no obsta a que antes en nuestro país hubiere grandes hombres que previeron el mal que han padecido la mayoría de los pueblos antiguos y que hoy son aun causas de perturbaciones en nuestras sociedades.

Un gran estadista argentino D. Bernardino Rivadavia, en los comienzos de nuestra vida política, fué uno de los pocos que comprendieron que por ser los herederos de la experiencia de nuestros antepasados debíamos aprovecharla en organizar sobre nuestra tierra desierta la colectividad que en ella iba a sentar sus reales.

Sus considerandos al decretar el *levantamiento del plano topográfico* el 4 de septiembre de 1812 nos ilustran con suficiencia sobre la profundidad de su pensamiento:

. . . que esa medida tenía por objeto repartir gratuitamente a los hijos del país suertes de estancia, proporcionada, y chacras para la siembra de granos,

bajo un sistema político que asegure el establecimiento de poblaciones y la felicidad de estas familias patricias *que, siendo víctimas de la codicia de los poderosos,* viven en la indigencia y en el abatimiento, *con escándalo de la razón y en perjuicio de los verdaderos interes del Estado.* (Cambio fundamental de la legislación europea.)

Pero alejado Rivadavia desgraciadamente del gobierno de la joven nación, no pudo hacer efectivas sus ideas; mas vuelto al poder; el 1° de Julio de 1822 expidió su célebre primer decreto: "Art° 1°—Ninguno de los terrenos que estén a las órdenes del Ministerio de Hacienda, será vendido. Art° 2—Los terrenos que expresa al artículo anterior, serán puestos en enfiteusis."

Extractamos de un interesante estudio del Doctor uruguayo D. Andrés Lamas, los siguientes párrafos al respecto:

"Por el artículo 1° cesaba la apropiación individual de la tierra pública.—Esas tierras serían, perpetuamente, propiedad del estado, esto es, quedaba siendo por ley social, como lo era por la naturaleza, propiedad de la comunidad. Por el artículo 2° las tierras se entregarían a la labor humana, bajo un contrato enfitéutico perfeccionado. Este contrato daba gratuitamente la tierra como instrumento de trabajo, puesto que la ley, como se verá en seguida, venía a sustituir el cánon fijo, que era el de la legislación antigua, por otro movible que conservándole el capital y el trabajo individual que le correspondía, solo absorbía la parte de la renta que nacía del trabajo y del progreso social."

El texto de la ley fundamental remitida al Congreso por D. Bernardino Rivadavia, es el siguiente:

Buenos Aires, *Mayo 18 de 1826.*

Art° 1°. Las tierras de propiedad pública, cuya enajenación por la ley 15 de febrero es prohibida en todo el territorio del Estado, se darán en enfiteusis durante el término, cuando menos, de 20 años, que empezarán a contarse desde el 1° de enero de 1827.

Art° 2°. En los primeros 10 años, el que los recibe en esta forma pagará al tesoro público la renta ó cánon correspondiente a un 8 % anual sobre el valor que se considere a dichas tierras, si son de pastoreo, o a un 4 % si son de pan-llevar.

Art° 3°. El valor de las tierras será graduado en términos equitativos por un Jury de cinco propietarios de los más inmediatos, en cuanto pueda ser, al que ha de justipreciarse, o de tres en caso de no haberlos en aquel número.

Art° 4°. El Gobierno reglará la forma en que ha de ser nombrado el Jury de que se habla en el artículo anterior, y el juez que ha de presidirlo.

Art° 5°. Si la valuación hecha por el Jury fuese reclamada, o por parte del enfiteuta, o por la del Fisco, resolverá definitivamente un segundo Jury, compuesto del mismo modo que el primero.

Art° 6°. La renta o cánon que por el artículo 2° se establece, empezará a correr desde el día en que al enfiteuta se mande dar posesión del terreno.

Art° 7°. El cánon correspondiente al primer año se satisfará por mitad en los dos años siguientes.

Art° 8°. Los períodos en que ha de enterarse el cánon establecido serán acordados por el Gobierno.

Art° 9°. Al vencimiento de los diez años que se fijan en el artículo 2°, la legislatura nacional reglará el cánon que ha de satisfacer el enfiteuta en los años siguientes, sobre el nuevo valor que se graduará entonces a las tierras, en la forma que la legislatura acuerde.

Desgraciadamente el cambio de hombres en la situación del país dejó para el recuerdo la prosperidad más grande que hubiera alcanzado país alguno.

A continuación haremos un estudio comparativo de la valuación territorial actual en la Provincia de Buenos Aires extensible en toda la República y la que debía ser con el cálculo científico del valor de la tierra por intermedio del Catastro.

VALUACIÓN DE LA PROPIEDAD PARA LA APLICACIÓN DE LA CONTRIBUCIÓN DIRECTA.

Por lo general, la valuación de las tierras por el Estado, ha sido sujeta a dos sistemas o formas distintas de tasación, el fiscal y el mixto, en el primero, el Gobierno es el encargado de fijar el precio del bien raíz, guiado por lo general,

por la renta que produce, en el segundo so forman comisiones de interesados por ambas partes; el propietario y el Estado, fijándose de común acuerdo en lo posible el valor sujeto al impuesto. Podríamos aún considerar un desdoblamiento en este último, haciéndolo en otro netamente particular, como ocurrío en algunos Estados, de manera que el propietario indivualmente asigna al predio su justo valor, bajo juramento, con las penalidades inherentes a las falsas declaraciones, ocultamiento, etc., etc. Según las naciones y hábitos fueron aplicados en una u otra forma por los Gobiernos la tasa u obligación, á los ciudadanos propietarios.

Ahora bien; el cambio de método, cuando se continúa la misma rutina, suele ser perjudicial, pues los directamente afectados, ven siempre en el fisco un usupador de sus derechos y convencidos de que si se implanta una reforma, si se inicia una nueva ley, no será seguramente en su beneficio, se oponen a ella con todas sus energías haciendo fracasar resoluciones que fueron transitorias, por no tener mayores fundamentos y que no eliminaban en absoluto el fondo, la base de la valuación actual, puesto que dejaban subsistir la antigua plataforma, que no acompañaba al país en su acentuado peso y en su evolución.

El análisis de los tres sistemas, sería materia de un estudio prolijo, que en los estrechos límites de este trabajo, no puede tener lugar, nos concretaremos a bosquejar el mixto,—implantado en la provincia de Buenos Aires, y el cual ha sido adoptado más a nuestro ambiente y que fuera de duda responde a nuestras tradiciones con cierta equidad.

Es los mejor que tenemos entre sus congéneres.

COMISIONES VALUADORAS LOCALES.

A los efectos de percibir el impuesto, el Poder Ejecutivo de la Provincia nombra en cada localidad un valuador y elige entre veinte vecinos propuestos por partes iguales, entre el Gerente del Banco que tiene más movimiento en la localidad y el receptor de rentas los cuatro que crea más competentes, debiendo ser un industrial, un representante del comercio, un propietario de la plaza urbana y un estanciero. La tarea impuesta a esta junta es la de tasar los inmuebles previa presentación a la misma del propietario y la correspondiente denuncia del valor, en que justiprecia su bien raíz.

Siendo la junta completamente autónoma toma o no en cuenta este primer informe, con apelación por el interesado al gran *Jury Central*.

Las fuerzas avaluadoras son guiadas en sus dictámenes por las instrucciones de la Dirección General de Rentas, ajustándose el avalúo sobre la renta que produce el bien raíz, pero en los casos de terrenos baldíos situados en las plantas urbanas que no producen renta alguna, se toma como base del avalúo el precio de las rentas últimas con una bonificación del 20%.

En las propiedades rurales al establecer por unidad de medida, se tiene en cuenta lo que producen o son susceptibles de producir, no incluyéndose el *valor de los edificios, cercos, arboledas obras de drenaje y toda otra de importancia hecha para mejorar las condiciones de la tierra*, a más se debe guiar por el cuadro demostrativo del valor de la hectárea de tierra, preparado al efecto por la Dirección de Rentas, la que toma por base 12 precios de arrendamientos para ganadería y agricultura, en los dos años anteriores a la época del avalúo, teniendo en cuenta también los informes de peritos en la materia y en especial el interés del 6 al 8% anual, al capital, según la ubicación del campo más cerca o lejos de la estación ferroviaria o pueblo.

JURY-CENTRAL.

El control indispensable a una obra de tanta trancendencia, es sometido en primer lugar, a una junta central y luego al mismo contribuyente, con las publicaciones de las listas de los mismos y sus correspondientes avalúos, dando

lugar a reclamos colectivos, o particulares, una vez evidenciados los errores, por el fiscal interesado.

La junta central dirigida por el P. E., y formada por los diez mayores contribuyentes, entre los que se incluyen representantes de la Sociedad Rural Argentina, Liga Agraria y Defensa Rural, debe entender en las apelaciones que se deducen de las resoluciones de las Juntas locales valuadoras del bien raíz.

Esta junta reglamenta su acción a un recto criterio, tomando en consideración, en los casos difíciles, multitud de informes y consideraciones posibles.

La norma, que por lo general guía sus actos, es ajustándose en lo posible al siguiente proyecto de apelación, en los casos de divergencia entre las valuaciones locales y los propietarios, o en los reclamos especiales interpuestos por los interesados.

1°. Se toma por base para la valuación de un predio el arrendamiento, considerando que su precio representa una renta anual del 8 %.

2°. Los predios desocupados y ocupados o los explotados directamente por sus dueños, se valúan por lo que produzcan, con los de sus linderos o tres linderos.

3°. Cuando un predio estuviera fraccionado por su dueño para arrendarlo a distintos precios, por razones de su calidad, condiciones, o formas de explotación, se estima el valor de cada fracción por el precio del arrendamiento.

4°. Cuando un predio estuviera dividido por la línea divisoria de los partidos y fueran distintas las valuaciones de cada fracción, se establece el valor de cada una de ellas de acuerdo con el procedimiento seguido en los artículos anteriores.

5°. En los casos en que el propietario haya aceptado tácita o expresamente la valuación de un predio hecha por la junta local, se confirma ésta, aun cuando el propietario hubiese declarado mayor valor o el valuador local hubiese apelado.

6°. Diariamente se dará a la publicidad, el detalle de las valuaciones definitivamente resueltas.

Una vez llegadas al Jury-Central todas las valuaciones y atendidos todos los reclamos, se procede a nivelar partido por partido, con los promedios respectivos; alterándose los avalúos que no respondan al criterio general y llevando mayor equidad, entre las valuaciones de uno y otro partido, de acuerdo a todo lo que pueda influir en el monto del bien raíz, con lo cual se puede formar las planillas definitivas del monto total de la valuación de la provincia.

VALUACIÓN CIENTÍFICA.

La valuación que hemos transcrito y especialmente en los párrafos acentuados, se acerca mucho a nuestras ideas, sobre todo en la planta rural, debiéndonos felicitar por que ella rechaza el anacrónico sistema de las categorías, dejado en vigencia tanto tiempo, en perjuicio de la exacta y justa percepción de la renta fiscal y aun más, al implantarse la valuación que acabamos de detallar, obra de los hombres laboriosos; el Doctor Ahumada, Ministro de Hacienda en aquel entonces, y el Sr. Hugo Stunz, Director General de Rentas, se hicieron por parte del primero sus comentadas declaraciones al periodismo, bosquejando con elocuentes ideas, la evolución, el nuevo rumbo que iban a tomar las rentas en la provincia de Buenos Aires y esto es necesario repetirlo, por que es la sana doctrina económica que se inicia en una nueva era de progreso, es el paso al triunfo de un ideal realizable con hombres de esfuerzos, perseverantes, ¿y por que no decirlo? lo tenemos en la práctica, lo palpamos y sus frutos ya se sienten, puesto que, continuada la obra con mayor tesón, con mayor energía si es posible, por el actual Ministro de Hacienda Dr. Robirosa y secundado por el Director de Rentas Dr. Ameghino lleva en la actualidad a equilibrar las finanzas y a producir los *supcravit*, anhelados, por los hombres de Gobierno.

Veamos lo que dijo el Doctor Ahumada el año 1912 en pocas palabras, pero muy significativo y todo cierto.

Lo que hoy sucede es, no solo injusto e irritante, sino antieconómico e inconstitucional. Propiedades de igual producción y de igual renta, de la misma

calidad, topografía, situación, proximidad a las estaciones y vías de comunicaciones, pagan tributos desiguales porque su valuación es desigual, desde su origen o por causas sobrevinientes.

De aquí resulta, que unos productores están más gravados que otros, en situación económicamente más desventajosa y no pueden competir sino con sacrificios que no son insignificantes, con los productores favorecidos, que constituyen una especie de casta privilegiada.

Hecha la nueva valuación, rectificadas las desigualdades, restablecido el justo equilibrio de los valores, los contribuyentes, que hoy son víctimas de aquellas desigualdades, pagarán seguramente menos, por efecto de la simple proporcionalidad del tributo, con la valuación de la materia imponible, toda vez que el propósito no es sacar mayor renta de la *contribución territorial*, sino pura y exclusivamente restablecer su uniformidad quebrantada, en beneficio de unos y en perjuicio de otros que son los más.

Sin embargo, esta *valuación* por más prolija que haya sido no es científica, no llega a su máximum de perfección, ella necesita un planeamiento más moderno, más matemático, los hombres podrán fallar, pero la ciencia nunca y ello se puede alcanzar con la base primordial, con los fundamentos de una obra estable, con el plano do estudios de la misma. . . . ¿Que seguridad pueden dar las declaraciones de los interesados, en esa operación, sea el fisco o el propietario?

¿Con qué elementos contundentes puede un *Jury-Central* dictar sus fallos? Y en última instancia ¿Cómo un Poder Ejecutivo una Corte Suprema, dicta sus sentencias? Se pone como prueba, para valorar superficies, antiquísimos títulos perfectamente saneados, con todas las reglas de la agrimensura, más el propietario ¿tendrá su predio en otras condiciones, en la práctica? ¿Sus alambrados no ocultarán maliciosamente una área fiscal, u otra cualquiera, no efectada a traba alguna, por no estar registrada o por no poderlo hacer?

¿Estará un campo en la zona de influencia calculada para un tipo de interés? ¿Es exacta esa zona de influencia? ¿Valen tanto esos terrenos por sus condiciones especiales de ubicación, y demás accidentes topográficos y agrícolas? ¿Aprovechan en igual forma los caminos, vías férreas o fluviales, puertos, etc., ciertos y privilegiados campos? ¿Cómo se han determinado con exactitud las longitudes a las posiciones relativas de la propiedad con sus linderos y en su conjunto? Estas preguntas y muchas otras se contestarían con cálculos puramente aproximados puesto que justamente falta la base, el cemento, para unir en un sólido conglomerado una obra de alta política financiera y ello fué reconocido por estadistas y hombres de ciencia, cuyo pensamiento se puede concretar a las siguientes palabras:

La valuación científica de la propiedad raíz, tiene por base el Catastro y el Catastro ¿qué es?, en síntesis debe representar la propiedad en sus dos exactas dimensiones y el valor económico de acuerdo al producto de su renta, ahora bien, un trabajo de ingeniería y otro económico, resuelven el primer problema, pues, con mensurar el bien raíz, calcular su superficie y avaluarlo se tendría reducido a la unidad el costo medio de la tierra. Pero, para los que sentimos la real utilidad de la obra y la importancia que merece y conociendo aunque sea superficialmente la misma, en otros países, debemos dejar un ancho margen a la definición, concretándonos, a lo que debe ser "el *conjunto de documentos gráficos necesarios para establecer la ubicación geodésica-topografica de sus dimensiones alti-planimétricas, así como los accidentes naturales que contenga y su relación económica-política respectiva, sección, área, nombre de propietario, costo*," *etc.*

Esto constituye en esta forma un instrumento público, cual testimonio de propiedad, o sea la identidad del inmueble. Al ser unido con los censos de poblaciones formarían el verdadero censo del Estado, actuando como balanza reguladora de sus finanzas, con lo que se tendría la noción vidente, gráfica de su grandeza o decadencia, así como de su estacionamiento, contribuyendo a encauzar en sus verdaderos límites el bienestar de un país, tanto en su vida económica como política.

Si el Catastro es la operación científica, bajo la cual hallamos perfectamente registrado todo bien raíz, todo inmueble, formado por *título tierra*, es imprescindible para que el éxito corone el esfuerzo de esa importante obra, unir a la misma la regulación normal de la propiedad a efecto de su conservación y el contralor que debe siempre existir, cual base inmutable de una operación matemática.

El Catrasto, en el vasto horizonte, en el amplio concepto de la palabra, no es solo la técnica del relevamiento parcelario, si no que él debe amalgamar el *Derecho* en todo el sentido de las leyes; concebir un catastro sin incluir en él la parte jurídica, sería desconocer su existencia.

Desde la implantación de los relevamientos topográfices en grandes extensiones de tierras, ocupadas por considerable números de propietarios, como sucede en pueblos, ciudades, etc., se proyectaron y pusieron en práctica leyes y reglamentaciones, para el mejor rendimiento y utilidad de la obra, así como se estudió la forma más lógica, a efecto de hacer gravitar sobre el fisco todo el peso del costo de la misma.

Francia fué la primera que enseñó al mundo la parte técnico-científica, correspondiéndole a Inglaterra (como siempre la más práctica) la solución económica del asunto. En efecto, era necesario tener el perfecto saneamiento de la propiedad, buscar la forma que ésta se consolidase ilimitadamente, a la vez eliminando pérdidas de tiempo en su perfeccionamiento que erogaría ingentes gastos.

Estudiado el punto, con todo detalle, por el Señor Torrens, presentó su célebre sistema al gobierno inglés, que fué con justicia aprobado en todas sus partes. Transcribiremos en otra oportunidad la ley, bajo todos sus puntos de vista, concretándonos a extraer de la misma el fondo, la base, que le ha dado extensa vida. Veámos donde reside su primordial fundamento. *El Estado garantiza la propiedad:* dice la precitada ley, suficiente apostolado, para inmortalizarla, en torno del cual gira el vasto engranaje del Catastro. En la actualidad, nuestras oficinas topográficas—geodésicas, en mensuras judiciales únicamente, dan o pretenden dar una semi—garantía de la propiedad medida, pero nada más, el criterio de un Juez, puede hacer variar toda su técnica operación, *ellas opinan*, sobre una operación de agrimensura, y su resultado será uno de los testigos de la causa, si se quiere con mayor fundamento, *partes no interesadas.*

La Ley Torrens con el *Catastro*, une el todo bajo sus sabios conceptos, dando a la propiedad el bienestar y vida, que necesita todo inmueble en su fácil desenvolvimiento. Largo sería el tema para auspiciarlo, por los grandes beneficios que erogaría y volveré al mismo cuando lo creamos oportuno, pero no sin antes hacer conocer la dificultad con que han tropezado los hombres emprendedores, al querer aconsejar a nuestros gobernantes que comenzaran la gran obra, y que la ejecutaran. La contestación fué siempre la misma; el temor de su elevado costo calculado al través de los similares en otros países; mas, creemos que el catastro en su conjunto, nunca llegará al 7 % del costo medio de la tierra en la República, como ha ocurrido en Francia, es nuestro convencimiento que su valor oscilará alrededor del 5 %, o tal vez menos, de manera que la Provincia de Buenos Aires por ejemplo, nos representaría un gasto de 20 millones de pesos m/n. aproximadamente, valor calculado en un estudio especial hecho por el que suscribe; lo que podría efectuarse en pocos años recurriendo a lo mucho que existe.

Pero esto no obsta a que, mientras se ejecuta la obra, se adopte para la implantación de una verdadera ley impositiva, la valuación de la propiedad territorial integrando en este caso la comisión de avalúos con técnicos especialistas, que luego formarán en la Junta del Catastro.

No queremos con esto decir que la actual contribución directa sea algo ilusorio, ella producirá un fuerte beneficio en la obra del catastro, será su guía

en el problema económico, será el croquis para el exacto dibujo de las formas, implantado el catastro, sólo una valuación territorial lo afectará, mas será innecesaria; pues la conservación al día de la otra tarea, traerá el saneamiento completo de los más pequeños deslices, de los más ínfimos detalles; y en cualquier momento, con los nuevos registros, con el parcelamiento total de la propiedad, se tendrá la fluctuación del valor de la tierra, una sola vez y para siempre.

Con estos antecedentes, si se quiere un poco amplios, evitaremos una larga disertación ajena a nuestra misión, apartándonos del estudio científico del catastro que desde luego podemos concretarlo a una completa obra, de Ciencias Económicas, otra de Ingeniería y una de Derecho, en toda su amplitud; amalgamada a un fin común, cuyo desglosamiento sería materia de muchas hojas, de libros voluminosos; por lo tanto rememoraremos unas cuantas consideraciones nacidas al calor del magno proyecto.

Fuera de duda que ésta debe ser la base sobre la que es necesario planear el vasto edificio de la valuación territorial, y sin ella faltarían los sólidos fundamentos de la justicia y de la equidad. Implantado el sistema, la lógica misma resolvería su organización, en un alto pie y desde ese instante, la ciencia representada por sus técnicos, produciría en el laboratorio del catastro, las cifras exactas del verdadero valor del bien raíz, pulido por el alto tribunal de hombres, abstraídos completamente en su misión, alejados de veladas presiones, sin la influencia nefasta, el contacto pernicioso de los intereses encontrados.

Del gabinete, saldrán las verdaderas zonas de influencia del interés, en la valuación, sus límites serán hechos cosumados y no se guiarán a capricho por linderos políticos, que nada tienen que ver con los económicos; las vías férreas, los canales, ríos, puertos, caminos, estaciones, e infinidad mayor de accidentes, serán los que producirán en el plano el exacto límite del valor vernal de la tierra, en una dada proporción y luego allí mismo, se tendrá el cauce normalizado, el equilibrio estable, entre un máximo y un mínimo tan cercano que se confundirán, y entonces . . . en esa calma, cualquier accidente fuera de lo normal será materia de estudio, se analizará buscando el remedio al enfermo, a la causa que produce su perturbación.

¡Con qué facilidad se hubieran podido apagar los efectos devoradores de la crisis, con solo haber tenido esa estadística, esa información gráfica! ¡Hoy no hubiéramos sufrido la racha de especulación desenfrenada, esa enorme epidemia que produjo la paralización de nuestras energías,—en los momentos que más la necesitábamos! Muy poco hubiera bastado, matando los primeros casos, eliminando los primeros valores, que como accidentes formaban montañas, en el plano horizontal del catastro, se aislaban en sus fronteras esos capitales que jamás producirían el interés común, en lo normal de los casos y una vez saneados, volverían a circular en su justo valor, llevando si fuera necesario, las huellas, el quebrantamiento de los días de fiebre.

Cuántos capitalistas, al creer haber hecho un buen negocio, con solo mirar el catastrose hubieran asombrado de haber sido especulados, de haber sido engañados!

Pero aun hay más; sin ser el catastro una panacea, resolvemos los múltiples problemas del impuesto, salvando los errores que hoy se cometen, por no existir, perjudicando en especial las rentas del Estado y el equilibrio de las finanzas gubernamentales.

Balanceada perfectamente la tierra, la implantación de la *tasa impositiva*, resulta de las necesidades generales de la comuna, el prorrateo es fácil y no puede incurrirse en error, además, contribuimos en el conjunto a aplicar las leyes con ecuanimidad, el interés del beneficio local recaería sobre los que lo utilizaren y al ejecutarse una obra, en una región determinada, antes se vería

si de allí pueden salir los intereses y las amortizaciones del capital invertido, evitando los enormes fracasos, que hoy sufre la República toda, en sus mal calculados presupuestos, que luego debe abonar la comunidad.—*La retribución de servicios*, resempeñaría el verdadero rol en las fuentes de recursos y estos jamás serían alterados, en provecho de unos cuantos para perjuicio de los demás.

Ardua tarea es la implatación del catastro, la valuación científica de la propiedad, necesidad tan sentida hoy día, que hasta los mismos jueces, jamás tomaron en consideración, el valor asignado actualmente al bien raíz, en la contribución directa, si no que con justa razón, siempre han hecho recaer los nombramientos en peritos en la materia y en los últimos tiempos se fué aún más alla, se exigió ser diplomado por ésta, en la organización a que nos referíamos anteriormente y con la definición general el campo se vuelve más vasto, en él deben primar los economistas, los letrados, los ingenieros, a ellos corresponde ser los jueces absolutos de la noble misión para cuyos cargos han sido designados; dejemos a un lado las falsas rutinas, busquemos lo real, lo verdadero, animémonos a perseverar en esta noble campaña, llevemos el esfuerzo de nuestro brazo y de nuestra inteligencia hasta hacer comprender donde reside la verdad, de donde nace y como se forman los conglomerados de las organizaciones civiles, aunemos nuestra ciencia que ella producirá en su conjunto, lo verdadero, lo ideal, hasta llegar a lo material en su semblanza, en la práctica.

Instemos a los Gobiernos para que comiencen la gran obra que necesitan como base primordial para su existencia, para su calculado desenvolvimiento, pues es la estadística de su progreso.

Solicitemos urgencia en estas medidas, el gran drama europeo se precipita, debemos recrudecer nuestra campaña, debemos prepararnos para recibir la enorme multitud de desilusionados, que abandonnarán las ruinas financieras al último acto de la gran guerra. Es aquí, es a América donde vendrán a cobijarse las verdaderas víctimas del desastra; *el pueblo europeo*, quien no podrá sostener la enorme carga de sus empréstitos, los que duplicarán, triplicarán sus presupuestos, necesitando para solventarse, acrecentar a valores enormes los impuestos, puesto que las cesiones de territorios nunca podrían levantar el peso exorbitante de los intereses en movimiento.

Preparemos nuestro catastro, implantemos esa noble contribución directa, que preparará el lote donde mañana la humilde familia, sea cual fuere su nacionalidad verá tranquila el sol nuestro, el sol de la humanidad; lleno de libertad, de epopeya, olvidando como eco lejano, el cruento murmullo del cañón que arrancó sus haciendas, sus vidas, dejándoles desolación y ruina.

Terminaremos este bosquejo con el pensamiento del eminente estadista y expresidente de la República Dr. Roque Saenz Peña:

Opino que el desideratum de una buena administración, debe aspirar a la simplicidad del régimen tributario, hasta llegar a la creación del impuesto único, el que, ubicado sobre la tierra como tronco generador de la riqueza, dejaría francas las ramas de todas las industrias para que se desenvolvieran sin la poda del estado, que hace sangrar dos veces al mismo tronco.

BIBLIOGRAFÍA.

Consultadas las memorias de Hacienda de la Provincia de Buenos Aires, los boletines oficiales de la Legislatura de la misma y las obras de George, Marx, Kautski, Vocke, etc., así como varios estadistas y financieros.

The CHAIRMAN. This concludes our list of papers for this morning. The session therefore will now stand adjourned.

Thereupon the session adjourned at 11.25 o'clock.

GENERAL SESSION OF SECTION IX.

New Willard Hotel,
Thursday morning, January 6, 1916.

Chairman, Jacob H. Hollander.

The session was called to order at 9.30 o'clock by the chairman.

The Chairman. Gentlemen of the section, it devolves upon me, in consequence of the continued illness of the chairman of the section, Dr. Rowe, to preside over the section in which we are gathered this morning. Our program is of length, and so, without further preliminaries, I shall ask Mr. Fred Lavis to present a paper on "Lines of future railway development."

LINES OF FUTURE RAILWAY DEVELOPMENT.

By F. LAVIS,
Consulting Railway Engineer, New York, N. Y.

To attempt to forecast the future development of transportation lines seems, when one thinks of the past, to be almost presumptuous, but in a general way the problem as it relates to the Western Hemisphere appears to the writer to narrow itself down to certain comprehensible limits.

In North America the main lines have been built, and all that is left to be done now seems to be the gradual extension of existing lines and the closing of the meshes of the net which already envelopes the whole country. There will probably be developed certain through routes from north to south toward the Gulf ports and probably a through route to Alaska, but these are all more in the nature of extensions and combinations of existing facilities rather than new developments in the sense that seems to be indicated by the title chosen by the chairman of the section for this paper.

In Central America there will be developments of considerable local interest. The capitals of each country which are in the interior will eventually, perhaps soon, be all directly connected with ports on both the Pacific and Gulf coasts. Certain locally developed trade centers will be connected with the coast and with each other, and, finally, all gradually connected up to provide adequate means of intercommunication between all important points and through Mexico directly with the United States.

The northern part of South America presents much the same aspect as Central America, and to some extent this is true also of the whole of the west coast, even including such an important system as that of Chile, which latter

has reached a high stage of development. The Valley of the Amazon may be eliminated from present consideration on account of the difficulties of both climate and topography; this, however, leaves for our consideration the vast area south of latitude 15 S., comprising part of Brazil and Bolivia, Argentina, Uruguay, and Paraguay.

This large extent of territory claims our attention not only because it is undeveloped, but also because it appears to be to-day on the verge of a development in which the extension of railway lines of communication are bound to play an important part. In another paper[1] the writer has discussed the difficulties which will be encountered in the development of this section due to the existence of lines of varying gauges, and has pointed out the desirability of adopting a uniform gauge of adequate width for efficient service, so that this need only now be mentioned in passing, and will not be further referred to. It is, however, most desirable that its importance be kept in mind.

The present state of the railway development of the territory referred to is shown by the accompanying map. Southerly from the watershed of the Amazon there is an area of fairly high, rolling, fertile country, of fairly good semitropical to temperate climate, which has hardly yet been touched, which is approximately 1,000 miles (1,600 kilimeters) square; that is, nearly equal to the area of that part of the United States from the Great Lakes to the Gulf, and east of Kansas City. (See p. 486.)

At present about all we know of this country is that a very large proportion of it is good or even excellent agricultural country, much of it very fine cattle country. It may never attain the intensive development of our own Middle West, because there seems now little likelihood of much industrial or manufacturing development owing to the lack of coal and iron in cheap, adjacent, and easily workable deposits, though there are other minerals and probably oil in the mountains to the west of it, but in view of the ever-increasing demand for, and even to-day the actual shortage of, food supplies, and especially of cattle, in Europe and even in North America, there seems to be little doubt but that this section must soon be brought into touch with the rest of the world; that is, it must be provided with adequate transportation facilities.

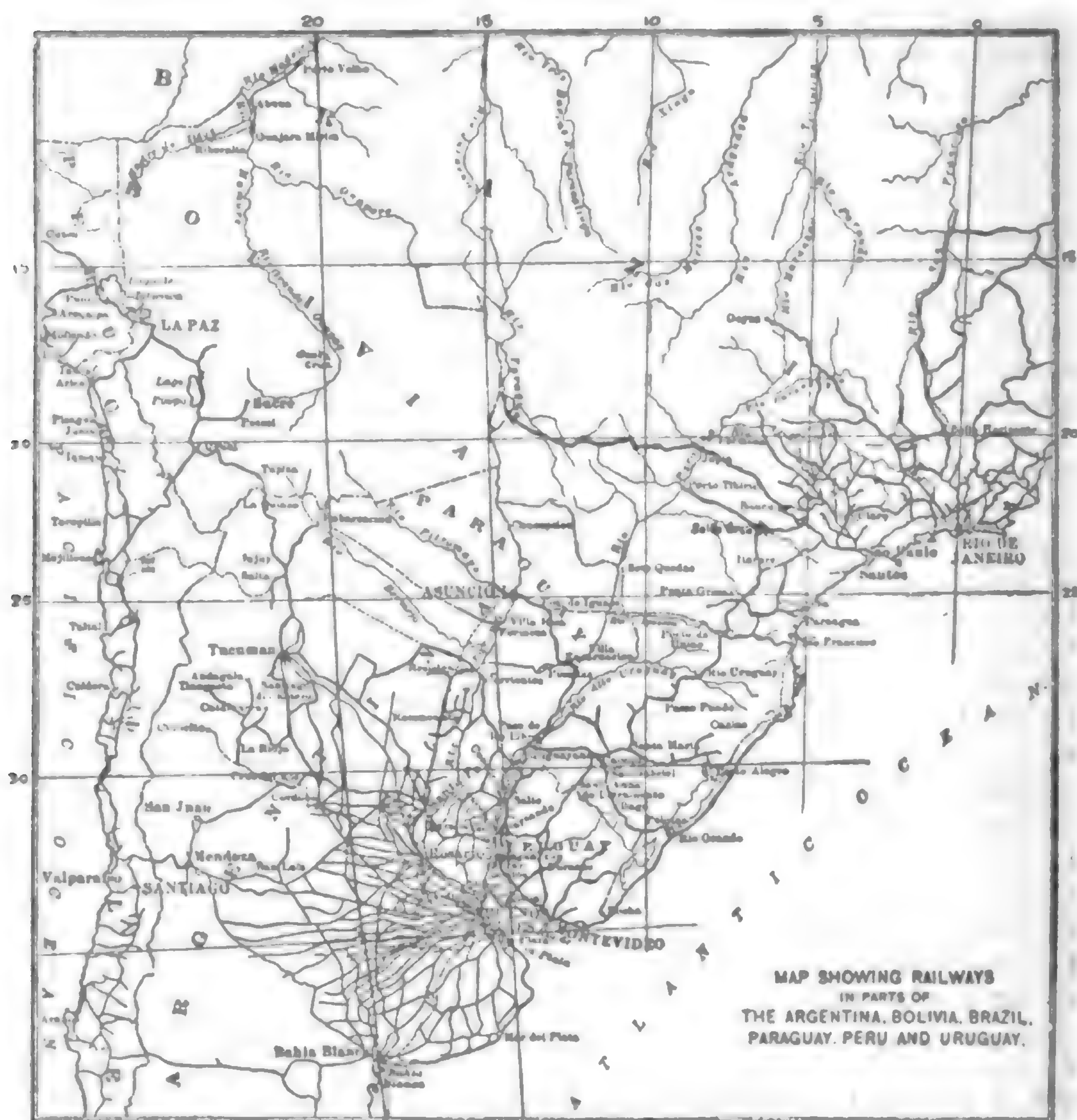
Before considering the lines along which the development of this region may be carried out, it will be well to first consider the existing transportation facilities and conditions, and the reasons why this area has so long remained practically untouched. In the south, in the Argentine, the railway net is fairly well developed, and its general lines fixed, south of Santa Fe and Cordoba, by a system of broad gauge (5 ft. 6 in.=1.68 m.) lines, there is a partial development north of Santa Fe by lines through Tucuman to Bolivia, built by the National Government, which skirt the eastern foothills and reach into the Andes, and there is another line from Santa Fe, following the west bank of the Parana, which is projected to reach as far as the Pilcomayo River on the border of Paraguay.

In Uruguay and in the Provinces of Entre Rios and Corrientes there is a net of standard gauge (4 ft. 8½ in.=1.44 m.) lines, and in Brazil there is the network to the west and north of São Paulo and Rio de Janeiro, which covers the coffee-producing country. Between this latter network and Uruguay there is the main trunk line, which is meter gauge (3 ft. 3 in.), and some branches of the Brazil Railway Co., running approximately north and south through the center of the States of Parana, Sta. Catharina, and Rio Grande do Sul in southern Brazil. In

[1] Uniform Gauge of Railways, Section V, cf. Vol. VI, Engineering, Proceedings of the Second Pan American Scientific Congress.

Paraguay there is one line (4 ft. 8½ in.=1.44 m.) from Asuncion to Encarnacion, which connects with the Argentine net, and which might easily also connect directly with the lines in Uruguay.

The principal reasons why this section has so far lacked the necessary transportation facilities, without which it can not be developed, are two. Firstly, because it has only been within the past few years that there has developed the great demand for agricultural and pastoral products which this region will principally supply and which is now becoming acute; and secondly, because



it has been to a certain extent cut off from the seaboard by territory through which railway lines could only be built and operated at costs and rates which were too high to provide the cheap transportation which such products must have. To the east there is a strip of broken and more or less difficult country 250 to 300 miles (400 to 500 kilometers) wide, parallel with and adjacent to the coast of Brazil, and to the south—that is, south of the Pilcomayo River—there is the long stretch of the Argentine Chaco, almost unexplored, which, while containing much good land, is not as good as that in the exceptionally fertile and easily worked valley of the lower Parana, or of the almost equally rich lands to

the north, and which has, therefore, formed an effective barrier to the construction of lines to provide cheap transportation.

For convenience, the undeveloped part of the region under consideration may be divided into two sections:

(A) Southern Brazil, and that part of Paraguay south of Asuncion.

(B) Brazil west of the Parana, Paraguay north of Asuncion, eastern Bolivia, and the Argentine Chaco, the latter being that part of the Argentine between Tucuman, Resistencia, and the Pilcomayo River.

Taking the first of these two sections, the main developments in addition to the natural extensions of existing lines will probably be that of a through route from Asuncion, the capital of Paraguay, to Rio de Janeiro; a through route from Buenos Aires to Rio de Janeiro; and certain east and west branches connecting with the existing north and south trunk line in southern Brazil. There may possibly be other north and south lines through this last-named territory, though this, on account of the topography, does not seem to be a development which may be expected at an early date.

A line from Asuncion to Rio is now projected to run due easterly from Asuncion to cross the Alto Parana, near the mouth of the Iguazu, and to follow the valley of this latter river to some point on the lines of the Brazil Railway Co. in the State of Parana, and on through Sao Paulo to Rio. It seems probable, however, that there may be a better route or at least as good a route, which can be built at less cost, farther to the north, running more northerly from Asuncion and then turning easterly toward Sao Paulo, possibly through the existing line from Salto Grande. However, these are details which should be worked out by systematic exploration. It may be noted, however, that present reports seem to indicate that this more northerly line would pass through fairly easy rolling country, where good alignment and fairly good grades can probably be obtained at reasonable cost.

The question of a through line from Buenos Aires to Rio has been under discussion for many years. There is actually through-rail connection in existence to-day, barring the two breaks in gauge, from Montevideo to Rio. A car ferry from Buenos Aires to Colonia, which has been proposed, and the construction of a short link would practically tie Buenos Aires on to it, but this line was not designed for fast or heavy travel. There seems to be some doubt whether this is the best through route, and a line has been proposed following the coast more or less all the way. There is said to be another possibility, however, of obtaining a very good line by using the already existing direct route from Buenos Aires to Paraguay, which is standard gauge, and which to-day has fairly good alignment, few grades in excess of 1 per cent, and which could easily, if necessary, be reduced to 0.7 or 0.8 per cent. From Encarnacion, where the car ferry crosses the Alto Parana, the line would run due northerly or a little east of north to connect with the already proposed line from Asuncion to Sao Paulo, incidentally developing good timber and agricultural lands in eastern Paraguay.

The second of the two sections referred to above is practically that comprised in the drainage area of the Alto Parana and Paraguay Rivers above their confluence at Corrientes. From this latter point north to latitude 15 S.—that is, roughly, to the watershed between the Parana and the Amazon—the distance is about 800 miles (1,200 kilometers), and in the other direction it may be roughly considered as the section lying between the parallels of 5° and 20° west of the Meridan of Rio, a length of about 1,000 miles (1,500 kilometers).

This area may be said to be practically untouched by railway development. There exists only the one line, just recently completed, running westerly from Sao Paulo to Corumba on the upper Paraguay, and the short line in the lower corner running from Asuncion to Encarnacion, where connection is made with the Argentine Railways and trains run through to Buenos Aires.

The natural outlet of quite a large part of this area, and particularly the western part of it, is that which follows the drainage toward Buenos Aires, but when the region of the Alto Parana is reached, above Encarnacion and Posadas, the terrain, on the eastern side of the river, at least, is so broken until we get as far north as Sete Quedas, that it is practically impossible to follow the valley of the river with any sort of a reasonable line, so that the outlet from that section of Brazil just north of Paraguay must probably be through Brazil to Brazilian ports.

It is thus clear that the topographical features in a general way require a development along lines which coincide with desirable political considerations. That is to say, that portion of Brazil comprised in the triangle between the Alto Parana and the border of Paraguay and Bolivia will be developed by lines leading to the chief centers of trade in Brazil—namely, Rio, Sao Paulo, Santos, and possibly some of the more southerly ports. The so-called Gran Chaco, comprising parts of Bolivia, Paraguay, and the Argentine lying within the drainage area on the western side of the River Paraguay, will be developed by lines leading directly to Santa Fe in the Argentine, the head of ocean navigation on the Parana River, and from there through the Argentine railway net to Rosario, Buenos Aires, etc. The remainder of Paraguay—that is, the part to the east of the Paraguay River—will have the choice of railway routes to both Buenos Aires and Rio and of the already existing fluvial route to the sea at Buenos Aires, though this latter route will likely share the fate of the Mississippi River, which has been practically abandoned for through transportation, when the railway routes are properly developed and operated.

The difficulty of approach to this territory has been at least partly overcome on the Brazilian side by lines now built and operated from Santos toward the interior, and by a comparatively small amount of work and proper cooperation can be entirely so, so that all that now remains is to perfect this route and establish the main lines toward the west. In the Argentine the efforts of the Government in the development of the Chaco have been directed toward the establishment of east and west lines leading toward the Parana and thence by river to Buenos Aires. The writer believes, however, that there should be a main north and south route opened up along a line due north, or a little to the west of a line due north from Santa Fe, which should be extended through Paraguay into Bolivia, as the history of transportation shows the inevitable superiority of railways over rivers as a means of transportation.

Such, in a general way, should be, it is believed, the main lines of development of this important area. For the best results it is evident that the interested governments should endeavor to establish in the beginning the main lines of these routes of communication in such a way that not only will they develop the country in the most desirable manner, but also lay them out so that they may be successful commercially.

It is probable that a close network of lines covering this area will be a matter of comparatively slow growth. It is obvious also that in an agricultural community expensively built low-grade lines are not commercially practicable, but it does seem that the establishment from the start of a few routes laid out to provide easy, fairly rapid, and cheap transportation and with less expensively built branch-line feeders, is a wise measure of economy for the countries con-

cerned, as a whole, and one toward which the national governments can afford to liberally contribute.

That such a course is wise and is practical hardly needs demonstration, but a specific practical example of the many which might be cited of the direct interest of the national and State governments in the development of transportation facilities is that of the State of New York, which is now spending $150,000,000, in addition to nearly $100,000,000 previously spent for a canal connecting the Great Lakes with tidewater at New York. This waterway is built and maintained by the State and its users pay little or nothing toward either its original cost or the cost of its maintenance.

This improvement of waterways by the National Governments for the direct benefit of a certain comparatively small proportion of the general population is common practice in all civilized communities and especially so in Europe, and is justified by the theory that although those directly interested in transportation seemingly benefit at the expense of the whole body politic, as a matter of fact, cheap transportation practically always benefits all the people and is the greatest aid and impetus to the general development of the country. There may be a question of the wisdom of spending this money for the development of fluvial transportation rather than for railway transportation, but there can be no doubt of the wisdom of the development of transportation in some form.

The development of the main transportation routes of the great area we are considering on truly economic lines is one of vital importance and one in which the various National Governments interested should take a practical and decided interest, so that the problems involved will not be handled as they necessarily were in the similar development of the great Middle West of the United States of North America by building lines here and there as the caprice or opportunity of immediate gain of this or that promotor, or contractor, or private individual dictated, but the main arteries should be laid out in the light of our present knowledge based on the experience of the past, rather than in the haphazard way which has marked so much the opening up of most of the heretofore undeveloped territory by lines of railway transportation. Cheap transportation has achieved a greater measure of success in the United States than it has elsewhere in spite of all the faults due to lack of experience. We do not blame those who laid out our railroads, we even marvel at times that they did as well as they did, but this is no excuse for not to-day benefiting by the results of their work and our own experience.

It seems to be obvious that certain main lines or routes should at an early date be established throughout this whole region, which should be the basis of its development. These main routes should be laid out by and with the cooperation of the various Governments by practical railway men experienced in the lines of development of such territory. Care must be taken that they are not merely engineers anxious to build important structures, high bridges, long tunnels, straight lines of low rates of gradient, etc., or on the other hand those who make a low first cost the primary consideration, but men versed in the science of transportation by railway, familiar with the costs and problems of operation, who can nicely balance present expediency with proper appreciation of future development.

Much of the area under consideration is virtually unexplored; that is, it is known only very generally and mapped only in the roughest manner. The Governments concerned can well afford (or at least could under normal conditions) to make such necessary detailed reconnaissances as would serve to indicate the probable character and direction of desirable lines, and to either build them or aid in their construction.

The construction of railways to meet the most obvious present expediency has been carried to even a further extent in South America than it has in the United States. There seems also to be lacking an adequate appreciation of the principles of the art or science of transportation in its more modern developments, and as now generally applied in this country on all the more important lines. Lines must be developed and laid out with an eye to the future, and while some of those now under consideration may not be commercialy successful from the start, they must still be laid out so that they will achieve as great a measure of success as possible and afford the largest opportunity for the development of the region tributary to them.

To avoid the economic waste of improperly developed and laid out lines and systems, which usually result as much from inadequate knowledge of the whole problem as from lack of technical knowledge of details, proper studies should promptly be made so that the development may proceed along a well thought out and properly arranged plan.

The interested Governments might well consider the appointment of a commission to study the whole subject and make recommendations as to definite routes. Such a commission must consist, of course, of men of the highest caliber, not only technically capable, but also with the commercial instinct, combining a vision of the future with practical common sense, and uninfluenced by any consideration save that of the best form of development for this region. The writer is not ordinarily in favor of Government ownership or operation of railways, but this does seem to be a case where Government aid and credit might well be used in the construction of properly designed main routes, which can be operated at a minimum cost, and which might not in this form be commercially attractive to those who must look for immediate cash returns on their investments. The importance, however, of properly laying out these main arteries can hardly be overestimated, and this seems to be a case where effective cooperation between the prestige of the National Government and commercial business sense will provide the ideal solution.

SYNOPSIS.

This paper points out the fact that the only area in North or South America where extensive development by railway trunk lines may be expected to take place in the immediate future is that in the drainage basis of the Paraguay and Alto Parana Rivers, comprising parts of the Argentine, Bolivia, Brazil, and Paraguay.

There is here a large area of desirable land nearly 1,000 miles (1,600 kms.) square, admirably suited for agricultural and pastoral development, which is practically entirely unprovided with transportation facilities, and in view of the great and urgent demand for the products of such a region, it appears reasonable to expect that such development must take place soon.

The reasons for its present lack of development are pointed out, as is also the necessity of providing properly designed main trunk lines into and through it, over which its products may be brought to the seaboard. It is probable that both the cooperation and aid of the various national governments will be required to lay out the routes and build the lines in such a way that the low rates, which alone will move the products of this territory, may be made available.

It is necessary that these lines be designed as efficient machines for transportation, rather than merely laid out in such a way that locomotives and cars may be able to run on the rails, and that all our present knowledge of the art of transportation should be applied to their design.

The CHAIRMAN. Gentlemen, if there are no comments to be made upon this interesting and suggestive analysis of the railroad problems in South America, the section will now proceed to hear a paper on the general subject of transportation, by Mr. Alfred P. Thom, a distinguished expert in the field of transportation and general counsel at Washington of the Southern Railway Co. The title of Mr. Thom's paper is "The relation of central to local control in the regulation of public utilities."

THE RELATION OF CENTRAL TO LOCAL CONTROL IN THE REGULATION OF PUBLIC UTILITIES.

By ALFRED P. THOM,

General Counsel at Washington of Southern Railway Company.

In surveying the triumphs of human effort, nothing is perhaps so marvelous as the extent of the emancipation which it has achieved over the limitations of time and distance.

The forces of steam and electricity have, under the guiding and masterful hand of genius, wrought a mighty revolution in the affairs of men. Under their magic influence, the idea of neighborhood has expanded from adjoining, or closely related, homes and businesses, so as to take in vast regions of human habitations and to embrace within the range of universal competition the markets of the world.

Peoples, once smitten with the curse of separation which came from Babel in the land of Shinar, have now, by the revolution due to the operation of these great forces, come once more into a great human brotherhood and are permitted in friendly emulation to carry the triumphs and blessings of their achievements into the remotest regions of the habitable earth.

Continents, once separated by the barriers of vast and forbidding oceans, have now been brought into close commercial and human touch and are able to create for each other's use products of their varying climates, soils, and industries, and to invite all the peoples of the earth to the banquet table of their social and creative genius.

The means which these great unifying forces have taken to bless mankind are exhibited in the agencies they have created for the transmission of intelligence and for the transportation of persons and things. These agencies are the most important expression of what have come to be known as public utilities, and it is of this class of public utilities that I shall speak to you to-day.

The very conception of an agency which finds its usefulness in its removal or modification of the limitations of time and distance forbids the idea of mere local control. As well might human genius seek to find a way to locally control the currents of the air and of the ocean, which make the climates and serve and bless by their beneficent influences all the peoples of the earth, as to attempt to control locally the agencies of transmission and transportation which are the foundation of the social and commercial intercourse between all parts of the habitable globe.

Perhaps nowhere is this question of larger importance or the lessons in respect to it more clearly taught than in the United States of America, and I shall accordingly take our own history and experience as the basis for the discussion of the subject which has been assigned to me.

Here the working of a mighty economic law is brought into sharp conflict with an important and powerful political conception of our dual form of government. We have created a union of sovereign and independent States which by adopting the Constitution surrendered certain attributes of their sovereignty and independence in order to establish a National Government and to confer upon it the powers deemed essential for national purposes.

Such surrender, in general terms, of sovereign powers by independent States, jealous of their sovereignty, gave rise at once to sharp differences of opinion as to the extent of the surrendered powers and created a wide divergence of political thought which has made the controversy at the base of the historic division of political parties in these United States.

It is interesting to note the evolution of this problem as it relates to the great public utilities of transportation and transmission and the way in which its economic merits have at times become obscured, and the philosophical solution of the problem has been retarded by the dominance of considerations which are merely political.

It was only 126 years ago that the United States became a Nation. On the 4th of March, 1789, they joined in putting into effect a Constitution which formed them into "a more perfect union" and organized them to take their place as a unit among the nations of the earth.

Only recently they had been separate and distinct colonies of Great Britain, legally foreign to and independent of each other, and were bound together by no ties except a sense, common to them all, of oppression and discontent and a common aspiration and purpose of liberty. They combined to declare and to fight for their independence of their mother country and to assert that as free and individual States they had "full power to levy war, conclude peace, contract alliances, establish commerce, and to do all other acts and things which independent States might of right do."

During the succeeding epoch-making struggle which marked the birth of a new Nation they sought to bind themselves together by something more enduring than the sympathies and exigencies of the existing war, and to this end adopted as their bond of union the Articles of Confederation. Jealous, however, of their separate and distinct autonomies, they were miserly in their grant of power to the central authority which they created. Desiring it to be efficient, but determined that it should possess none of their cherished sovereignty, they withheld from it the power to provide through its own agencies a national revenue. It could not levy taxes but was made dependent upon the States for their respective contributions. It, therefore, could not build or equip a navy nor raise or arm or pay an army. Thus it had no effective power to provide for the common defense, to protect any national right, or to command the respect or the fair treatment of foreign nations. Likewise it had no power to control or regulate trade, either foreign or domestic. That power was carefully reserved to the States themselves individually.

Principally on this account the Articles of Confederation were soon found to be utterly inadequate to a national existence. It is true that they remained untouched during the continuance of the war. This, however, was not because they were satisfactory, but because every public energy, to the exclusion of all questions of domestic organization, was devoted to the achievement of freedom and independence.

A government without a purse, and hence without power to provide for the common defense or to insure domestic tranquillity, was a mere "rope of sand" and could not long endure. From the standpoint of mere national cohesion and existence it was found utterly inadequate.

But there was another cause for dissatisfaction which in the condition of the public mind, temporarily freed as it was from the fear of foreign invasion and insistently turning to the necessity for rebuilding domestic prosperity after the waste of war, was hardly of less importance than a provision for the common defense and for the preservation of the national existence. The needs of trade were becoming more and more apparent and its just regulation the subject of greater and more universal public concern. In considering the causes which brought our Federal Constitution into existence it is of peculiar interest to study the influence which the desire for a uniform regulation of commerce, and consequently of the public utility on which commerce was dependent, had upon the adoption of the Constitution and upon its character.

When the war ended and independence was an accomplished fact, each State possessed a sovereignty which was practically unlimited over its foreign commerce and over its commerce with the other States. Between many of them there was a race of greed and selfishness for commercial advantage and supremacy.

To appreciate the prevailing conditions it must be noted that each State possessed the power of imposing export taxes and could thus keep its products at home, excluding them from the use and enjoyment of the people of the other States; that each State possessed the power of imposing import duties and could thus exclude the people of the other States from its markets; and that each State retained complete control over its own ports, and thus by its commercial policy could, through the competition of ports, regulate or break down the commercial policy of another State in regard to its own ports and in regard to its own commerce; and by all these means could affect and, in fact, could control relations with foreign countries.

Internally, these powers were large enough, not only to create State rivalries and State enmities, but to elevate the States of greatest commercial power into complete commercial, and finally into complete political, ascendency over their weaker sister States, while externally they were sufficiently important to affect and control international relationships.

Nor were these powers merely theoretical. They were brought into active and oppressive operation. They were made the means of commercial war by one State upon another.

For example:

Virginia, by her export duties and inspection laws, with the incidental tax, sought to keep her tobacco at home.

Maryland, by her inspection laws and taxes, sought to do the same with regard to her potash and pearlash.

Massachusetts prohibited the exportation of grain or unmanufactured calfskins and imposed an onerous inspection tax on exports to other States of tobacco, butter, and other products; while North Carolina, for a limited time, laid an embargo on the exportation to other States of corn, wheat, flour, beef, bacon, and other necessaries of life.

Turning to imports:

New York, by imposing an import duty, sought to exclude from its markets the butter, milk, and other dairy products of New Jersey and the firewood of Connecticut.

Rhode Island imposed an ad valorem tax of 5 per cent on all articles imported into that State from the other States as well as from foreign countries, with a proviso for reciprocal relief. And so with other States.

In regard to the commercial rivalry and war of ports, it was customary for States having available ports to impose an unlimited tax on all goods reaching

this continent through their ports, and thus to subject, for the benefit of themselves, the people of the other States to a substantial burden of taxation.

For example, the ports of Boston and New York were at one time far behind Newport in the value of their imports, and Rhode Island, according to the Supreme Court of the United States, paid all the expenses of her government by duties on goods landed at her principal ports.

The condition at that time of commercial selfishness and greed between the States is thus described by Fiske in his work on "The Critical Period of American History, 1783–1789," at page 144:

Meanwhile, the different States, with their different tariff and tonnage acts, began to make commercial war upon one another. No sooner had the other three New England States virtually closed their ports to British shipping than Connecticut threw hers wide open, an act which she followed by laying duties upon imports from Massachusetts.

Pennsylvania discriminated against Delaware; and New Jersey, pillaged at once by both her greater neighbors, was compared to a cask tapped at both ends. The conduct of New York became especially selfish and blameworthy. That rapid growth which was soon to carry the city and State to a position of primacy in the Union had already begun. After the departure of the British the revival of business went on with leaps and bounds. The feeling of local patriotism waxed strong, and in no one was it more completely manifested than in George Clinton, the Revolutionary general, whom the people elected governor for nine successive terms. * * * It was his first article of faith that New York must be the greatest State in the Union. But his conceptions of statesmanship were extremely narrow. In his mind, the welfare of New York meant the pulling down and thrusting aside of all her neighbors and rivals. * * * Under his guidance, the history of New York during the five years following the peace of 1783 was a shameful story of greedy monopoly and sectional hate. Of all the thirteen States none behaved worse except Rhode Island.

A single instance, which occurred early in 1787, may serve as an illustration. The city of New York, with its population of 30,000 souls, had long been supplied with firewood from Connecticut, and with butter and cheese, chickens and garden vegetables, from the thrifty farms of New Jersey. This trade, it was observed, carried thousands of dollars out of the city and into the pockets of detested Yankees and despised Jerseymen. It was ruinous to domestic industry, said the men of New York. It must be stopped by those effective remedies of the Sangrado school of economic doctors, a navigation act and a protective tariff.

Acts were accordingly passed obliging every Yankee sloop which came down through Hell Gate, and every Jersey market boat which was rowed across from Paulus Hook to Cortlandt Street, to pay entrance fees and obtain clearances at the customhouse, just as was done by ships from London or Hamburg; and not a cartload of Connecticut firewood could be delivered at the back door of a country house in Beekman Street until it should have paid a heavy duty. Great and just was the wrath of the farmers and lumbermen. The New Jersey Legislature made up its mind to retaliate. * * * Connecticut was equally prompt. At a great meeting of business men, held at New London, it was unanimously agreed to suspend all commercial intercourse with New York. Every merchant signed an agreement, under penalty of $250 for the first offense, not to send any goods whatever into the hated State for a period of 12 months. By such retaliatory measures it was hoped that New York might be compelled to rescind her odious enactment. But such meetings and such resolves bore an ominous likeness to the meetings and resolves which in the years before 1775 had heralded a state of war; and but for the good work done by the Federal convention another five years would scarcely have elapsed before shots would have been fired and seeds of perennial hatred sown on the shores that looked toward Manhattan Island.

But these discriminations and exactions of one State as against the trade of another, this fierce commercial rivalry, this internecine warfare which threatened the commercial destruction of some States and the undue elevation, prosperity, and dominance of others, were not the only reasons for the insistent demand, which preceded and finally controlled the Constitutional Convention of

1787, in regard to the establishment of a system of just and equitable regulation of commerce between the States by an authority fairly representing them all.

The question of commercial regulation, in addition to its commercial relation to the trade between the existing States, possessed also a most important and commanding political aspect. The development of the great West was then going on and had been stimulated by the emigration thither from the older States incident to the readjustments after the war, and the settlement of the whole western region was proceeding with great rapidity. The West was spoken of by George Washington as a "rising world," and signified particularly, in the minds of the statesmen of that day, the territory now constituting the States of Tennessee and Kentucky and the States afterwards carved out of the territory northwest of the Ohio and east of the Mississippi Rivers. The question of the future political affiliations of this large and important territory was a question of prime and of vast importance to the then existing States. Great Britain was on the northern boundary with its Dominion of Canada, and Spain on the south commanded the mouth, and hence commanded the navigation, of the Mississippi River. The course of trade is determined by the inducements that are offered and the facilities it can command, and political relationships are strongly influenced by commercial ties and interests. It was therefore one of the most important problems of that day to bind this great and developing western country to the Eastern States by the ties of intimate commercial intercourse. This could not be done if the Eastern States could enrich themselves by imposts upon the commerce paid for by the people of the West or by excluding the competitive products of the West from the eastern markets.

Great Britain or Spain, close neighbors on the north and south, could easily outbid such a policy of narrowness and greed as the people of the West saw already in operation in many of the most important Eastern States, and it was apparent that whether or not such a policy should be adopted, could not be safely left to the individual States.

George Washington, in speaking of the future political affiliations of these pioneer western people, said:

> If we can not bind these people to us by interest, and it is not otherwise to be effected but by a commercial knot, we shall be no more to them after a while than great Britain or Spain, and they may be as closely linked with one of those powers as we wish them to be with us, and, in that event, they may be a severe thorn in our side.

It thus became politically, as well as economically, necessary to find a way of fairly regulating commerce in the interest of all, free from the narrowness, the greed, and the selfishness of individual States.

The only way of remedying these commercial evils, which were flagrant and were universally recognized, and of meeting the political exigencies of the situation, was, according to the practically universal belief of the day, to exclude the States from the power to regulate commerce among the States and with foreign nations and to confer that power upon a central authority which should fairly and equitably represent them all.

The public consciousness on this subject was, prior to the convention, indicated in a great variety of ways and from a great variety of sources.

Alexander Hamilton declared for a central government with "complete sovereignty over all that relates to war, peace, trade, and finance."

James Monroe, as chairman of a committee of Congress, in 1785 submitted a report declaring that:

> The United States in Congress assembled shall have the sole and exclusive right and power of determining on peace and war, except in the cases mentioned in the sixth article, * * * and of regulating the trade of the States, as well with foreign nations as with each other." * * *

James Madison moved in the General Assembly of Virginia a resolution for a convention of delegates of all the States "to take into consideration the trade of the United States; to examine the relative situation and trade of the said States; to consider how far a uniform system in their commercial regulations be necessary to their common interest and permanent harmony," etc.

There were similar expressions of view in the legislatures of Rhode Island, of Connecticut, of New Jersey, in resolutions of town meetings, and in reports of committees of Congress.

The Madison resolution resulted in the assembling of the Annapolis Convention in 1786 and in a recommendation by the delegates there assembled for the purpose of considering the regulation of commerce, that Congress should call a general convention of all the States to meet in Philadelphia on the second Monday in May, 1787, "to devise such further provisions as shall appear to be necessary to render the Constitution of the Federal Government adequate to the exigencies of the Union."

This was the convention which framed the Constitution, and the declaration of the Supreme Court of the United States in the case of Cook *v.* Pennsylvania, 97 United States, 574, is amply justified, to the effect that:

> A careful reader of the history of the times which immediately preceded the assembling of the convention which framed the American Constitution can not fail to discover that the need of some equitable and just regulation of commerce was among the most influential causes which led to its meeting.

The result of its deliberations on the four large subjects of national concern enumerated by Alexander Hamilton—which are the four fundamental essentials of national existence and efficiency—and as to which Hamilton declared that the Federal Government should possess complete sovereignty, namely, the purse, war, peace, and commerce, is exhibited in the following clauses of the Constitution:

> The Congress shall have power: *
> To lay and collect taxes, duties, imposts and excises, to pay debts and provide for the common defense and general welfare. * * *
> To borrow money on the credit of the United States.
> To regulate commerce with foreign nations and among the several States, and with the Indian tribes.
> To declare war. * * *
> To raise and support armies.
> To provide and maintain a navy.

The fullness, the competency and the completeness of no one of these powers have ever been questioned, except of the power to regulate commerce.

It is universally recognized that it is a right of each State that the Federal Government shall provide for the common defense; that the Federal Government shall determine as between peace and war; that it shall raise and support armies and shall equip and maintain a navy. These are rights which, by universal concession, the individual States acquired by entering the Union.

But there are other rights of the States not less important and not less sacred. These include the right to avail themselves, separately and individually, of the protection guaranteed to them and to their people by the Federal Constitution against the selfishness in trade of their sister States.

In adopting the commerce clause of our Constitution, the States intended to secure protection against this very thing. In the light of the history of its adoption, it is, since the Constitution, a right of New Jersey—as complete as the right to be defended by the national power—that New York shall not regulate the trade between them as it did when it excluded the products of New Jersey industry from the New York markets; it is a right of the State of Connecticut, since the Constitution, that its products shall not be excluded from

the markets of New York and Boston by State action, and it is, since the Constitution, a right of each of the States that Virginia and North Carolina and Tennessee and the great food producing States of the West shall not be able, as Virginia and North Carolina once did, to put an embargo upon the shipments of their products beyond their respective borders, and shall not be able to exclude the people of the other States from the riches of their farms, of their forests, of their mines, and of their factories. It is a right of each State that Congress alone, which represents all, shall be the exclusive arbiter of what is right and just in interstate and foreign trade, and that no State shall be permitted to advance itself at the expense and to the disadvantage of the others, perchance by its narrowness, its greed, and its selfishness in trade. This is a right which the States acquired by entering the compact of the Union.

The existence of this exclusive power in Congress to regulate interstate and foreign commerce—the power of central as contradistinguished from local control—is of far larger importance now than it was even when the Constitution was adopted.

Commerce itself in these 126 years has assumed a far greater consequence in the affairs and destinies of men and of nations than it had in those early days. As I have said, steam and electricity have come with their mighty revolutionizing influence and have brought all the States and all the nations into close and intimate commercial relationships. Men no longer deal in trade most largely with their immediate neighbors, but find it essential to their success to have free and unimpeded and adequate access to the markets of the world.

The interests of the producing States—particularly the States of the South and West, where there are no markets of the first importance—imperatively require easy and quick transportation to the world's great market cities, such as New York, Philadelphia, Boston, and Chicago in this country, and Liverpool, London, Paris, and Berlin in Europe, and to the great unoccupied and inviting markets of South America.

It may be safely stated that, with the exception of some of the States in which are located markets of the first magnitude, at least 85 per cent of the trade of the United States moves in interstate and foreign commerce. It traverses vast distances; it must pay low mileage rates to reach and to compete in distant markets; it can not, because of the value of time and the small margins of profit, permit frequent handlings or breakings of bulk.

To meet these economic conditions—to satisfy the essential needs and to accommodate the movement of this great traffic—it has become necessary to create long and continuous lines of railroad in the place of the short and disconnected lines which were once adequate to the requirements of trade. These large systems of railroad, which have come in obedience to the economic law which demands continuous, rapid, and unbroken transportation, necessarily extend across, and are, under existing law, in many respects subject to the varying policies of many States.

The problem of largest magnitude which confronts this country in regard to them is how their continuity of service shall be preserved unimpeded and what shall be the quality of adequacy and efficiency which their transportation facilities shall possess.

It must be remembered that the transportation capacity of the carriers marks the maximum limit of the trade, and hence of the producing capacity, of the people whom they serve. No more will be—no more can be—produced than can be carried to market. Therefore each State, being dependent for its prosperity upon the producing capacity of its people, is deeply concerned that the

transportation capacity of the carriers which serve it shall be adequate and shall not be crippled or impaired.

A broad and wise policy in dealing with the instrumentalities of commerce is, therefore, a matter of supreme interest to all localities and to all the States. A narrow, or niggardly, or selfish policy, if adopted by any one of the States through which a railroad passes, may seriously cripple and depress the commerce of every other State which the railroad serves.

No adequate conception of the railroad problem, as it affects the development of this country and the growth of its commerce, can ignore the necessity that transportation facilities must be all the time growing and improving to keep pace with the growth and expansion of commerce—otherwise there will be no growth or expansion of commerce.

Such an increase in railroad facilities involves the constant input of new capital, for no railroad is ever finished except in a dead country. It is a mere platitude to say that new capital can only be attracted by credit. While no one State through which a railroad passes can alone establish its credit, a single State can impair or destroy it.

If a railroad runs through and serves 11 States, 10 of them may be guided by broad and liberal views and may be controlled by the policy of encouraging the establishment and maintenance of adequate transportation facilities. The eleventh may, however, have no adequate commercial outlook or may be temporarily under the domination of small and time-serving politicians. It may reduce rates on State traffic so as to barely escape the line of confiscation, and thus escape the condemnation of the Constitution. It may be unwilling that its State traffic shall contribute anything to the liberal program, favored by the other 10, which would build for the future and insure the present and continuing adequacy of the transportation facilities on which all are equally dependent.

In such a case, what shall be done? Shall the 10 States bow to the will or caprice of the one and allow it to control? Shall they permit the narrow views of the one State to limit the standard or the character or the quality of facilities which their people shall enjoy?

If, on the other hand, the standard of facilities is not brought down to this low level and is to be made adequate to the needs of all, then the commerce of the other 10 States, or interstate commerce, or foreign commerce, or all three, must bear the burden, which the dissenting State has refused to share, of building up adequate transportation facilities.

In either case the dissenting State, in a very effective way, regulates commerce and the business opportunities of all. It either determines the standard of the commercial facilities, and therefore the commercial opportunities of the other States, or it throws on them an unfair and undue proportion of the burden of sustaining them at a level of higher efficiency.

Moreover, in the Shreveport case, recently decided by the Supreme Court of the United States, and in another State which I shall not more particularly identify, State rates have been greatly reduced for the avowed purpose of preserving State markets for State trade, and thus excluding and discriminating against the trade of other States.

It is a right of each of these States, thus oppressed by the narrow and selfish policy of one, to have its commerce freed from these State restrictions and regulated by Congress, representing all the States, in accordance with the compact of the Constitution.

I have referred to the great importance to the welfare of all the States of transportation facilities—to the complete dependence of the States upon their adequacy, their efficiency, and their readiness for service. I have called atten-

tion to the credit of the carriers—their capacity to obtain new money—as bearing an important, and in fact controlling, relationship to the problem of transportation.

In this connection, and as exerting an important influence on the financial capacity of the carriers, it is appropriate to consider their capacity to issue and to dispose of their securities.

It is manifest that if such issue is to be regulated by the individual States every State is at the mercy of the others. A bond to be available in the market must, as a rule—especially now, when most bonds are necessarily junior liens—be secured upon the whole railroad line; and this crosses many States. One of the States, therefore, if it possesses the power to regulate the issue of securities of an interstate carrier, may disappoint and defeat a financial plan approved by all the other States and necessary to the carrier's transportation efficiency.

Even if the State does not press its authority to the extent of absolutely declining to sanction the issue, it may selfishly, and as a political expedient—and in actual experience sometimes does—attach a condition that a designated portion of the proceeds shall be spent within its borders, where it may not in fact be needed, when the needs of interstate commerce and the commerce of other States fairly require that the whole shall be expended elsewhere.

The power of the State to consent or to withhold its consent is equivalent to a power to control the character and the location of additional transportation facilities against the views and the interests of all the other States.

But even if the necessity for the new capital is universally recognized, and the approval of the States is not ultimately withheld, the time necessary to permit the investigation and to secure the approval of so many would, or might, constitute a fatal obstacle in the way of a successful financial operation. Promptness—ability to avail without unreasonable delay of a favorable market—is essential to success in placing large financial offerings.

Conceive the not impossible case suggested by a recent dramatic event in the history of the world.

A railroad company has been maturing for some time past a large financial plan with the purpose of taking advantage of a general market such as we all know recurs at periods sometimes widely separated. A great steamer, say the *Lusitania*, sails at a moment of international tension. Those in charge of the financial policy of the railroad are justified in believing that something may happen to that steamer which will affect international relations and destroy for many months, and perhaps for years, a market for securities. So far as their own business preparation is concerned, they are ready to bring out the carefully matured plan and place their securities. It becomes, then, a question of days before the possibility of disaster to that steamer may be realized. Meanwhile some State commission, for some such reason as has been suggested, is delaying the approval of the issue. It does delay until the disaster happens and so defeats the financial plan, with the result that there is at least an indefinite postponement of additional railroad facilities essential to the best interest of the commerce of the country.

Of course, the chances for such delay are increased just in proportion to the number of States which must be consulted in the matter of regulation.

From whatever standpoint, therefore, it be considered, the destructive effect of a power in the several States to determine and limit the financial capacity of the carriers, through a regulation of the issue of their securities, is apparent. It is manifest that the financial capacity of a carrier which serves many States is a matter of transcendent importance to them all. No one of them should be

allowed to control or to injuriously affect it. It is a right of each of the States that a matter so important and in which all of them have so vital an interest shall not be controlled by one which may have a selfish interest or an illiberal policy.

It is a right of the States, in respect of this matter of common and supreme concern, that an authority, which is the authority of all, whose power is delegated by all, which represents all and which acts for all, shall alone be the arbiter of what may be conflicting views and interests, and shall alone regulate and control.

And yet 19 States have enacted statutes, each asserting for itself the individual right to control the issue of stocks and bonds of interstate carriers. And the end is not yet, for many other States are considering legislation which will give to them a power which they see is already being exercised by others.

Another striking illustration of the exercise by one State of a power to discriminate against and to injure the commerce of other States and interstate and foreign commerce is found in the State laws which impose heavy penalties for failure to furnish cars or other instrumentalities for its internal commerce within a limited time.

One of the States now imposes a fine of $5 for each day of delay; an adjoining State fixes the fine at $1 per day; and the interstate commerce law fixes no per diem penalty at all. A case may well be imagined where a carrier is reasonably supplied with equipment, but a large portion of it has moved in the regular channels of commerce to a point on or off its line and distant from the place where the demand for it is made. If, under these circumstances, there is a demand for a car by a shipper of intrastate traffic in the State which imposes a heavy fine for delay, and is also made by a shipper in the State which imposes a light fine, and demand by a shipper in interstate commerce as to which no fine at all is imposed, and there is at the moment, by reason of special circumstances, only one car available to meet all three of these demands, it, of course, results that the carrier in self-protection must deliver the one available car to the shipper in the State which imposes the largest fine, and the others must go without. In other words, the greediest, the most selfish and the most unreasonable State thus secures by its own laws a preference for its own commerce over the commerce of its sister States and over interstate and foreign commerce.

Is it not a right of the other States to have the question of a fair distribution of available car supply determined, not by one of the interested States, but by the authority which represents them all and can see that a rule of equity and fairness shall prevail?

In addition to what has been said, a long and formidable list of State statutes, already in effect, might be given, which, without the consent of the other States, impose serious burdens of expense upon their commerce, and thus upon their people. All directly discriminate, or have the effect of discriminating against their commerce—State, interstate, and foreign.

Thus, 3 States have passed laws making it illegal for a carrier having repair shops in the State to send any of its equipment, which it is possible to repair there, out of the State for repairs in another State; 15 States have attempted to secure preferred treatment of their State traffic, either by heavy penalties for delays or by prescribing a minimum movement of freight cars, some of them requiring a minimum movement of 50 miles per day, whereas the average movement for the United States is not over 26 miles per day—one of these States imposing a fine of $10 per hour for the forbidden delay; 20 States have hours-of-service laws, varying from 10 to 16 hours; 20 States have extra-crew laws; 28 States have headlight laws, with varying require-

ments as to the character of the lights; and 14 States have safety-appliance acts.

Let me take an illustration from a single class of these statutes. I will select the extra-crew laws of the States of New Jersey and Pennsylvania.

These laws impose upon the railroads operating within their respective limits an expense for unnecessary employees amounting to more than $1,700,000 a year. There is nothing in these State laws putting the burden of this expense on their own traffic alone. That burden extends to all the traffic these railroads carry, and thus the traffic of Virginia and Tennessee and Mississippi and of all the American States whose traffic enters New Jersey or Pennsylvania is laid under tribute by these State enactments.

Or the proposition may be stated another way. The expense put upon the railroads by the extra-crew statutes of these two States would pay the interest at 5 per cent upon a capital fund of more than $34,000,000. By requiring an amount equivalent to the interest on this capital to be expended on useless employees—at least on employees as to which the other States were not consulted—instead of being used to obtain new capital, these two States have, by their own independent action, reduced the borrowing capacity of the railroads to the extent of $34,000,000. That amount of capital would have bought 1,360 locomotives, or 3,400 steel passenger cars, or 34,000 freight cars, or 1,133,000 tons of steel rails, or would have block-signaled 13,600 miles of road.

Thus facilities immensely valuable to the traffic of the other States have been made impossible, not by their own action, but by the independent action of New Jersey and Pennsylvania.

It is apparent that these and similar statutes which impose burdens and create discriminations violate the principle of just and equal treatment as against the States which have a more liberal policy and constitute serious invasions of the field of regulation by the States which adopt them to the substantial prejudice of those which have not sought to obtain special or preferential treatment.

Again, it may be asked, Is it not a right of the States that no one State shall possess the power of imposing a burden which the people of other States must help to bear or of securing a preference for its own traffic over the traffic of the others?

In order to secure equality of burden and of privilege and the benefit of an adequate and efficient transportation system the power to regulate commerce among the States and with foreign nations was, by their own action, withdrawn from the individual States and conferred upon Congress, which represents them all.

In fact, it may be truly said that the Constitution itself was the offspring of the insistent demand of the States for protection in trade against the other States. It is therefore peculiarly a right of the States to have this purpose fully and fairly carried into effect.

It seems not unprofitable to turn from the problem of commercial regulation, considered only as a problem of peace, to the lessons we must learn in regard to it from the great events now occurring on the Continent of Europe.

It will be merely fatuous in us to close our eyes to the fact that the organization of society will be revolutionized in consequence of the historic developments of the past 18 months.

We had fondly dreamed that the possibility of great wars had disappeared in the purer light of civilization, and that the barbaric and savage instinct of nations had been obliterated by the advance of moral and intellectual principles among mankind.

This dream has been rudely dissipated, and the world has been made to realize that when it comes to war there has been no advance in humanity or morality since the Goths and Huns and Vandals fought and slew and pillaged 14 centuries ago. The only difference is a difference in slaying power and in efficiency. These have advanced as science has marked out the way. The lesson has been taught, in the blood and agony and tears of nations, that hereafter when it comes to the test it is only the organized and efficient nation which can survive.

The world has marveled to see a nation with comparatively small territorial possessions rise in arms against the strongest nations of the earth and defy them all with its organized energy and power.

Whatever may be the ultimate result of this titanic struggle, the lesson of national efficiency has been taught and will never be forgotten. Its influence has reached even to this remote Western Hemisphere, and hereafter men in our land will put a new value on our national union and will recognize the necessity for stronger and more perfect national organization to meet the dangers which all of us see may easily assail us. We have had it borne in upon us that the most militant and most efficient nation of Europe has outgrown its territorial limits and is looking for other lands to colonize, into which it will introduce its own national ideals, its own national efficiency, and its own militant and aggressive spirit.

If it should happen that her policies embrace the acquisition and colonization of certain parts of the American continent, we, in common with all the nations of the Western Hemisphere, will be confronted by greatly increased international complications and will need both national power and national efficiency to deal with the conditions which will be certain to arise.

Steam and electricity and science have done their work and have made efficient nations essential to meet these mighty forces. The day of the disorganized and defenseless State has passed, just as the day of the sailing vessel and the wooden ship is gone.

Wisdom requires us to recognize the change which these mighty forces and these mighty events have wrought. We of the United States can not step backward and disintegrate ourselves into separate States. We must be efficient as a Nation if we are to deal successfully with our national emergencies.

All this, I trust, will not involve us in the necessity of becoming a military Nation, but it undoubtedly puts upon us the imperative obligation to organize our industrial life upon the most efficient basis. Our resources must not only exist, but they must be easily available. We must realize that the agitation must cease for a divided sovereignty in respect of functions which are in essence national. We must appreciate that efficient transportation is an essential condition of national efficiency, and if we are to halt or weaken our transportation systems at State lines, or subject them to local instead of central control, by permitting the imposition of burdens or the exercise of hurtful, inharmonious, or unwise regulation we will make national efficiency impossible. The creation of transportation facilities for a great nation is not the work of a day. It is a matter of slow and difficult growth and is the work of "forward-looking" men, who must anticipate conditions and have facilities in readiness for use when they are needed.

Is it wise for us to subject a matter of such universal concern and of such national importance to the uncertain policies and partial and inadequate outlook of separate localities or of a single State? Our Constitution confides it to Congress, which represents the general welfare and common interests of all the States. The evolution of forces, the progress of events and the growth

of nations emphasize the wisdom and the necessity of reposing the power of commercial regulation, which so essentially involves the national interest and the national efficiency, in the hands of the authority which is alone responsible to all the people for the performance of national duties and the preservation of our national liberty.

If it was to the interest of the individual States to have a single and impartial regulation of interstate commerce and its instrumentalities when the question was the free introduction into New York of the firewood of Connecticut and the dairy products of New Jersey, it is far more so now in view of the influential relationship which transportation has come to bear to our national efficiency and to the liberties and destinies of our people. For we must remember that in a period given up to a frenzy for overlegislation no business interest dependent for its stability upon the public confidence can long survive, if it is assailable, as the transportation business now is, on so many sides and from such an infinite variety of sources.

We in the United States must realize that inevitably commerce will eventually be regulated exclusively by our Federal Government. The existing system of private ownership can not long endure if it is to be permanently subjected to the increased burdens and conflicting policies of a dual, or of a many-sided, regulation. It must be put under one master with a harmonious and constructive policy, or it will inevitably fail. When this failure comes and governmental ownership takes the place of the present system, the States will be deprived of all power, and Congress alone will necessarily regulate every detail of railroad management and all the instrumentalities of commerce.

It must also be realized among us that the regulation of interstate commerce and its instrumentalities is no violation of the rights of the States, is no invasion of their prerogatives, is in no sense in derogation of their reserved sovereignty, but in reality is merely the specific performance of the contract which each State bargained for when it subscribed to the Constitution. It is their covenanted right, and the covenanted right of each of them, as well as their highest interest, that the commerce in which one in common with another State is interested shall be regulated by the fair and impartial judgment of the authority which alone springs from and is responsible to them all.

As was said by Chief Justice Marshall in McCullough *v.* Maryland (4 Wheat., 405), in speaking of the powers of the Federal Government, of which one is the power to regulate commerce among the States and with foreign nations:

> It is the Government of all; its powers are delegated by all; it represents all and acts for all. Though any one State may be willing to control its operations, no State is willing to allow others to control them.

From the foregoing it will be perceived that our problem—the problem of the United States of America which I have taken as an illustration of my theme—in regard to the local or central control of these public utilities has resolved itself into the problem of State, as contradistinguished from national control.

The only difficulty in our way to a philosophical solution of the problem is a political one and not a formidable difference among us over its economic merits. The controversy between those who still contend that the governmental regulation of the public utilities of transportation and transmission should be local in essential features, and not national, presents perhaps the most important political and economic controversy now engaging the thoughts of our people.

It is fundamental in character. Our public conscience has rightly excluded the corporate owners of public utilities from participation in politics. This, however, has had the unfortunate consequence of entirely emancipating the

agitators against them. A defenseless corporation engaged in these utilities has been found an inviting field for political agitation and an easy prey of the political agitator.

As a vast power of governmental regulation is among us still exercised locally, the power of the local agitator is enormous. Complaints about a local rate, which in the view of the company can not be determined singly, but is governed by economic considerations and by its bearing upon large areas of commerce, are, under our existing system, determinable in each State in the light of the apparent interests of that State alone. The agitator who wishes to make political capital with his community finds it easy to array public opinion of such a limited territory against the company which has no defense, because by this system it is deprived of the opportunity to appeal to the common judgment of the whole public interested in the question.

The relation of the rates of one community to the rates of another may be established by the soundest economic considerations, and yet the one of these communities, which may feel without reason that it is discriminated against, is easily aroused to a sense of indignation and wrong and possesses the power, under our exsting systems of regulation, to inflict irreparable injury upon the public agency which in the case supposed is serving both communities with impartial fairness and yet can not find any protection in that fact.

It is encouraging to note that the economic truth suggested by these and similar considerations is rapidly gaining recognition in the minds of our people.

They are perceiving that the instrument of interstate and foreign commerce is in fact the instrument of their commercial opportunity, and must, in the public interest, be established in its integrity and maintained in its efficiency; that the public interest is too large to permit a commercial instrument on which all are dependent to be harried or weakened or controlled by mere local interest or power; that commerce, in its larger and dominant aspects, is a national concern—national not only in the sense that the Nation and not localities must deal with other nations in regard to it, but national also in the sense that there is a common interest of the people, an interest in the prevention of the encroachment of one local community upon the just rights of another, and in the prevention of the imposition of a narrow, inadequate, and destructive policy of one community upon the commercial instrument in the continued adequacy and efficiency of which all are interested and on which all are dependent—an interest so universal and so fundamental that the only power among us which is free from mere local control and can act for all with even-handed justice can or should be trusted to regulate and control the subject.

And perhaps a still larger view is now forcing itself upon the attention of our people. As suggested in a former part of this paper, the world has recently awakened from the fancied security incident to a long and uninterrupted devotion to the arts of peace to find itself plunged overnight into the most colossal and bloody war which history has ever known. This presents to every nation the problem of providing for the national defense. The duty to do this is always a national and not a mere local obligation. Transportation lies at the very foundation of the national power to mobilize its military and economic resources and thus to perform this essentially national function. This consideration gives to the instrument of transportation a national importance and a national aspect which are entirely apart from, although completely in consonance with, the needs of peaceful commerce. From this standpoint, it is essential that the national policy—the policy dictated by the transportation needs for national defense and not a mere local policy—should control the standard of present and continuing efficiency by which these

transportation instrumentalities must be governed. The public mind is making marked progress toward the conclusion that if a nation is to be in a condition to defend the national interests and the national rights, the efficiency of the instruments of transportation can not be entrusted to the varying views and standards of small communities on which the duty of national defense does not constitutionally rest, but must be confided to the power responsible for the protection of our national welfare and the preservation of our liberties as a people.

Thus, in this great congress, representative of the intelligence, of the thought, of the hopes, and of the aspirations of all the nations of the Western Hemisphere, bound together by the indestructible ties of interest and brotherhood and actuated by a common purpose and a common aspiration of liberty, let the great political and economic truth find fullest recognition, that if the welfare and independence of our respective peoples are to be maintained, the public utilities of transportation and transmission must be freed from the destructive influences of local control and entrusted to the national power, which alone can defend our peaceful commerce and which alone, in case of aggression, can protect our national liberties and preserve our national integrity and independence.

The CHAIRMAN. We shall now proceed, gentlemen of the section, after having heard this profound and philosophical review of one of the most urgent problems of American economic organization, to hear a review of the natural resources and political and social institutions of Guatemala, by a distinguished member of the congress, Dr. Joaquim de Oliveira Botelho, of Brazil, on the subject of "Climate, education, commerce, and resources of Guatemala."

EDUCACIÓN, CLIMA, RIQUEZAS MINERALÓGICAS Y AGRÍCOLAS, COMERCIO, FINANZAS Y BENEFICENCIA DE LA REPÚBLICA DE GUATEMALA.

Por JOAQUIM DE OLIVEIRA BOTELHO,

Miembro Titular de la Academia Nacional de Medicina de Río Janeiro.

La República de Guatemala, bajo la bien inspirada dirección de su actual mandatario, el estadista Licenciado Don Manuel Estrada Cabrera, ha tenido un constante progreso en todos los ramos de la administración pública y particularmente en el de la instrucción.

En relación a la extensión de su territorio, que es de 130,000 kilómetros cuadrados, y de su población, que es de 2,500,000 habitantes aproximadamente, Guatemala es uno de los países de nuestra América que cuenta relativamente mayor número de escuelas y una cultura tan extensa como cualquiera otra de las Repúblicas del continente.

En el país existen más de 2,300 escuelas que enseñan a leer a más o menos 150,000 niños, y la administración va aumentando anualmente el número de escuelas primarias, a proporción que se van condensando los núcleos de población y que las vías de comunicación van facilitando la convivencia de sus habitantes.

Por esta forma el analfabetismo va disminuyendo constante y progresivamente en el país, a proporción que la población de éste va aumentando, y que el progreso material va alcanzando a todas las partes de su territorio.

En la bella y civilizada capital de Guatemala, la instrucción secundaria y superior perfecciónase y aumenta año por año, de manera de dejar en el espíritu del extranjero que visita la bonita metrópoli, la agradable impresión de que Guatemala es la República de las letras.

En la capital existe una facultad de derecho y notariado, una facultad de medicina y farmacia, con instituto dental anexo; una escuela de parteras, una escuela de ingeniería, un instituto nacional central de varones, una escuela normal de profesores e instituto de indígenas, un instituto normal central de señoritas, una escuela práctica de señoritas, una escuela práctica de varones, una escuela nacional de comercio, una academia nacional de medicina, una escuela de bellas artes, una academia de inglés, una escuela nacional de música, una academia de dibujo y pintura, una escuela de artes y oficios femenina, una escuela de telegrafía, una escuela de aviación, una academia militar, tenida como una de las mejores de América, numerosas escuelas primarias de varones y de niños y 50 escuelas y colegios particulares.

En Quezaltenango también existen un instituto central de varones y otro de señoritas, una facultad de derecho y otra de medicina, etc. Y en la parte oriental del país existen también varias otras facultades y centros de instrucción primaria, secundaria y superior. En toda la República existen 25 escuelas prácticas, en edificios propios, amplios, higiénicos y elegantemente construídos.

De lo expuesto se puede y se debe deducir que la instrucción primaria y la educación secundaria y superior están profusamente extendidas en el país, justificando el concepto que me he formado cuando conocí la bella metrópoli guatemalteca, de que es Guatemala la República de las letras.

La beneficencia pública es organizada y sostenida en el país por el Estado y la iniciativa particular. Entre los establecimientos mantenidos por el Estado figuran 21 hospitales, que asilan anualmente más o menos 20,000 pacientes.

Entre los establecimientos píos creados por el Estado, debemos destacar la casa-cuna llamada "Maternidad Joaquina," que es un suntuoso, moderno y artístico palacio erigido por la progresista administración Estrada Cabrera en el bello paseo de la Reforma, en la ciudad de Guatemala.

El país posee puertos en el Océano Atlántico y en el Océano Pacífico, ligados por vías férreas. Los países vecinos también se encuentran en comunicación con Guatemala por medio de ferrocarriles. El viaje de México a Guatemala, por ejemplo, es una bella y pintoresca excursión, tanto en el trecho mexicano como en el guatemalteco. Se va de México a Córdoba por el Ferrocarril Mexicano; de Córdoba a Santa Lucrecia por el Ferrocarril de Veracruz al Pacífico; de Santa Lucrecia a San Jerónimo por el Ferrocarril de Tehuantepec, y de San Jerónimo a Tapachula por el Ferrocarril Pan-Americano hasta la frontera de Guatemala, donde se conecta con el ferrocarril guatemalteco hasta su bella capital.

En Guatemala funcionan seis bancos de emisión y descuento, y numerosas casas bancarias. El Banco Americano ha sido obligado a aumentar últimamente su capital en $3,000,000 para poder satisfacer a sus transacciones, que se extienden día a día.

En la balanza de su importación y exportación, Guatemala tiene un saldo apreciable en su favor. Es así, por ejemplo, que en 1912 la importación fué, en oro americano, de $9,822,462, y la exportación de $12,601,969, habiendo, pues, un saldo aproximado de $3,000,000 en favor de la exportación. Es de creer que en los años que han seguido a 1912, el saldo de la exportación haya aumentado, porque, según estoy informado, la venta del café para el exterior ha sido mayor.

La vida financiera de Guatemala no ha podido sustraerse a la crisis mundial ocasionada por la guerra europea. Ante el espectáculo de un acontecimiento de

magnitudes tan enormes que pesaba sobre los elementos constitutivos de la vida pública en todas sus manifestaciones, sólo la prudencia y exquisito tino del Jefe de la Nación han podido solucionar, en cuanto cabe, las dificultades que afectan el organismo del Estado.

Actualmente la situación del país puede compendiarse en los siguientes puntos:

HACIENDA PÚBLICA.

El movimiento de las rentas durante la primera mitad del año de 1915, comparado con el primer semestre del año de 1914, acusa el resultado que a continuación se detalla.

Producto de derechos de importación, moneda nacional	$680,323.22
Baja en 1915, moneda nacional	576,751.68
Derechos de importación, oro americano	391,432.28
Baja en 1915, oro americano	593,828.65
Producto de derechos de exportación, moneda nacional	1,815.00
Baja en 1915, moneda nacional	6,421.36
Derechos de exportación, oro americano	1,077,573.46
Baja en 1915, oro americano	55,339.72
Producto de las rentas de licores y contribuciones, moneda nacional	8,060,726.25
Alza en 1915	36,787.54

Se advierte, desde luego, que las dificultades del comercio con las plazas europeas, en donde a largos plazos se obtenían las mercaderías, han sido la causa de la reducción de las importaciones.

Por lo que respecta a la exportación, la disminución es insignificante y más bien puede interpretarse como una suspensión en el envío de productos mientras encuentran nuevas plazas que sustituyan a las que, por la misma guerra, se han cerrado.

Por las estadísticas del año de 1914 se observa que los mercados de Alemania remitieron a Guatemala productos por valor de $1,474,191.43 oro, y que dicho país les mandó por valor de $5,412,580.30 oro, siendo su suspensión momentánea la que desniveló la balanza comercial.

El presupuesto de gastos del país, determina para el año la suma de $60,000,000, moneda nacional; por consiguiente, y calculando el cambio del oro americano de que en parte se componen las rentas nacionales, a razón del 30 por 1, el primer semestre no acusa déficit, y es de esperarse con fundamento que igual resultado se obtenga en el segundo semestre que acaba de terminar.

CRÉDITO PÚBLICO.

No ha habido, pues, necesidad de recurrir a un empréstito para llenar las necesidades del servicio administrativo; más bien los intereses de la deuda externa están pagados anticipadamente hasta el 30 de junio de 1916.

El monto del pasivo al principiar el año es: Deuda externa, £2,357,062 17s 7d, o sean $11,785,314.39 oro; deuda interna, oro, $934,645.80 y en moneda nacional $117,853,635.29; correspondiendo a cada habitante, de la primera, $5.89, y de la segunda, $0.50, y $58.90 moneda nacional; sumas insignificantes si se toma en cuenta la riqueza del país y la premeditada idea del Señor Presidente Constitucional de la República de no recargarla con nuevas contribuciones. Cada habitante contribuye al fondo común con $1.33 oro, aproximadamente.

La deuda interna no ha tenido movilización, pero el Gobierno estudia actualmente el proyecto de arreglo por el cual sus bonos vuelvan a figurar entre las transacciones de la finanza nacional.

SITUACIÓN BANCARIA Y MONETARIA.

En el principio de la conflagración europea, cuando el pánico se apoderó de los espíritus timoratos, el Señor Presidente de la República, como medida de precaución, tuvo a bien ayudar, de los fondos nacionales, a algunos de los bancos establecidos con la suma de $5,000,000, medida oportuna que afirmó la confianza en aquellos establecimientos de crédito, de donde se habían retirado muchos depósitos, pudiendo continuar su servicio en favor de la agricultura, del comercio y de la industria. La suma prestada ya fué devuelta.

Los seis bancos establecidos giran con un capital de $42,686,671 en billetes, incluso su fondo de reserva, habiendo dado en el primer semestre del año que ha terminado, un interés de 8½ por ciento.

Las operaciones de crédito han continuado sin interrupción en el interior de la República, sosteniéndose sin quebranto las bases de la riqueza nacional. Por consiguiente, el cultivo del café, principal artículo de exportación, se ha atendido y aun ensanchado, y lo mismo puede decirse del ramo de ganadería, del cultivo de caña y de los demás ramos agrícolas de las crecientes industrias del país.

La moneda corriente está representada hoy por el billete de banco y del comité bancario, que con el valor de un peso, equivalente a 2½ o 3 centavos oro americano, según las fluctuaciones del cambio, satisface a las necesidades del país. Propiamente dicho, el papel moneda representa una moneda fiduciaria, y aunque se celebran transacciones en billetes, el tipo que sirve de norma en las ventas de café, en la compra de mercaderías y en las grandes transacciones, es el dólar.

La moneda de plata también entra como elemento en los negocios, ya que las Repúblicas del Salvador y México, vecinas de Guatemala, tienen como base para sus negociaciones la plata, quedando, por lo mismo, en las plazas guatemaltecas dicha moneda sujeta al alza o a la baja, según la demanda y las fluctuaciones del tipo de cambio. Viniéndose la producción exportable en moneda de oro, la existencia de este metal no escasea.

FINANZAS PÚBLICAS.

En más de un año de haberse iniciado la crisis, Guatemala no se ha visto obligada a decretar la ley moratoria, como han hecho muchos países, ni ha lamentado la quiebra de casas comerciales, siendo satisfactorio para el país haberse sostenido con sus propios elementos y por lo tanto, sin recurrir hasta hoy a empréstitos internos ni externos.

No obstante la indecisión y obscuridad que presentaban los negocios, los productos guatemaltecos alcanzan hoy precios favorables, los que habrán de influir directamente en las finanzas públicas.

El café se cotiza actualmente en firme alrededor de $8 por cada 100 libras de café en pergamino. Se hizo un ensayo de exportación de ganado vivo a New Orleans, con resultados que prometen gran desarrollo en ese ramo, ya que, por lo más inmediato, está Guatemala en condiciones de hacer la competencia al ganado de la Argentina y del Uruguay. Se ha mandado también azúcar a las otras Repúblicas de Centro América y a los Estados Unidos, dando liquidaciones favorables. Las exportaciones de hule, chicle, pieles, cacao, madera y minerales, han obtenido precios halagadores; y por último, la producción del banano, que ha obtenido mayor ensanche, encuentra plaza segura en Norte América.

De lo expuesto se deduce que aunque las rentas públicas no han tenido aumento en la exportación, los precios de realización traerán sin duda un

aumento de riqueza, tanto más favorable, cuanto que en el intercambio las importaciones han sido sensiblemente reducidas.

RIQUEZA PÚBLICA.

Los buenos precios de los artículos de exportación, la abundante producción y favorable demanda, así como la alta cotización de los que se consumen en el país, tienen forzosamente que reflejarse en la riqueza nacional y en el bienestar de sus habitantes. He ahí por que el adelanto progresivo de Guatemala, no ha sufrido en su desarrollo.

El país da garantías de seguridad al emigrante, la población aumenta, y con ella se levantan nuevas y hermosas propiedades urbanas y nuevas fincas, que son prenda segura del acrecimiento de la producción; y a la par de la iniciativa privada, está la del Gobierno, promoviendo obras públicas de positivo provecho de uno al otro extremo de la República.

El Señor Presidente ha dicho que de la crisis producida por la guerra europea, debe sacar el pueblo algún provecho positivo; y al efecto, por su iniciativa, se han hecho en climas adecuados grandes siembras de trigo, para restar de la importación la fuerte suma de oro que representa la harina que se consume; y mediante su decidido apoyo, se establece la explotación de nuevas industrias que, en no lejano día, serán, con las que ya existen establecidas, una manifiesta representación de la independencia comercial de Guatemala y por consecuencia, de su positivo adelanto.

FERROCARRILES.

El país está servido por una bien planeada red ferroviaria que efectúa el tráfico con los principales centros agrícolas y comerciales de la República.

En 1912 la extensión kilométrica de las líneas férreas era la siguiente:

	Kilómetros.
Ferrocallir de Guatemala	334. 040
Ferrocarril Central de Guatemala	289. 383
Ferrocarril de Vera-Paz	45. 043

Cupo al actual Presidente guatemalteco, el Excmo. Señor Licenciado Don Manuel Estrada Cabrera, la gloria de haber podido concluir el Ferrocarril Transoceánico, que pone en contacto los puertos del Océano Atlántico con los del Océano Pacífico.

En mucho se habría obviado la dificultad de transportes por tierra con el norte, si el ferrocarril pan americano no sufriera obstrucciones en territorio mexicano, debido a su estado revolucionario, ya que Guatemala tiene la satisfacción de que una de sus líneas se ha entroncado, hace algún tiempo, con el Transcontinental de México.

RED TELEGRÁFICA Y TELEFÓNICA.

Una red telegráfica y telefónica se extiende por todo el país, poniendo en pronta comunicación los lugares más remotos. La extensión kilométrica de las líneas telegráficas era en 1912: 6,088,463 kilómetros y la de las telefónicas de 790,132 kilómetros con 325 oficinas y más de 1,000 empleados.

VÍAS MARÍTIMAS DE COMUNICACIÓN.

Tanto los puertos del Atlántico como los del Pacífico están bien servidos por vías de comunicación. Los puertos del Atlántico son visitados por los vapores

de la United Fruit Co., que hacen servicio regular de carga y pasajeros entre Puerto Barrios y los principales puertos norteamericanos, con itinerario fijo, bien como con los puertos del Mar de las Antillas y el Mar Caribe hasta Colón. Esta compañía tiene conexión con la Colón-Panamá y extiende conocimientos directos con la compañía ferrocarrilera de Verapaz, visitando también los puertos del Atlántico.

Un vapor sale de Livingston para Puerto Barrios todos los domingos y los miércoles, regresando el mismo día. El vapor correo para Panzós sale en la madrugada del lunes de Livingston, y de Panzós el miércoles.

El servicio de cabotaje de los puertos del Atlántico es regularmente hecho por los referidos vapores, y también por todos los vapores que tocan en Puerto Barrios y hacen igualmente escala en Livingston.

La Hamburgo American Line posee un servicio regular de vapores entre los puertos del Atlántico y Hamburgo, Havre, Londres, Bremen, etc., que se encuentra ahora en momentáneo receso por causa de la guerra. Esta compañía extiende conocimientos directos con el Ferrocarril de Verapaz y las líneas del Ferrocarril Internacional de Centro América.

Además de las compañías mencionadas, llegan a Puerto Barrios y Livingston veleros y vapores extraordinarios de diferentes banderas, conduciendo cargamentos especiales. Las vías de comunicación por el Atlántico son, pues, suficientes para el intercambio y las necesidades del país de este lado de su territorio.

Del lado del Océano Pacífico están los puertos de San José, Champerico y Ocós. Catorce vapores mensuales ordinarios, de tres rutas distintas, visitan los referidos puertos. La Compañía de Ferrocarril del Salvador, la Pacific Mail Steamship Co. y la Cosmos Line, hacen servicio con itinerario fijo entre los puertos indicados y el de Salina Cruz, puerto mexicano, con conocimientos directos con conexión con los vapores del Atlántico, vía Istmo de Tehuantepec o Istmo de Panamá.

Las compañías que hacen las conexiones son: Hamburg American Line, Compagnie Générale Transatlantique, Leyland Line, Cuban Line, Compañía Transatlántica de Barcelona, American Hawaiian Co., New York Cuba Mail Steamship Co., Wolvin Linie y Compañía Mexicana de Navegación.

Los puertos del Océano Pacífico son, pues, suficientemente provistos, como los del Océano Atlántico, de vías de comunicación con el resto del mundo.

La creación de un servicio de navegación que ponga a Guatemala en contacto directo con los más importantes puertos de la América del Sur, sea por la vía del Pacífico o por la del Atlántico, se impone como necesidad impostergable. Guatemala es liberal con los buques que visitan sus playas, porque no les cobra ningún derecho de puerto.

En el capítulo anterior me había olvidado referir que Guatemala posee dos excelentes servicios de telegrafía inalámbrica, así como dos servicios igualmente buenos de aerostación.

COMERCIO, AGRICULTURA Y MINAS.

La República de Guatemala es un país tan agrícola cuanto minero. Su subsuelo posee grandes riquezas minerales, entre las que sobresalen el cobre, el zinc, la plata, el plomo y el oro.

Son las siguientes algunas de las proporciones de metal en el volumen de mineral:

Cobre (promedio), 12.50 por ciento; zinc (promedio), 16.50 por ciento; plomo (promedio), 11.87 por ciento; plata (promedio), K. 0.600.

Los principales departamentos mineros son Huehuetenango, Chiquimula, Izabal, Santa Rosa y Guatemala. En todos ellos se trabaja activamente y se hacen grandes inversiones de capital, tanto del país como del extranjero. Las inversiones en 1912 alcanzaron la suma de $4,000,000 moneda nacional.

Lo explotación en larga escala de las excelentes aguas minerales guatemaltecas se impone como una necesidad comercial e higiénica para el país.

Muchas enfermedades gástricas, renales y vesicales, que no raramente dificultan la actividad del hombre, cuando no lo destruyen, pueden ser ventajosa e insensiblemente combatidas por el uso corriente de las deliciosas aguas minerales que vierte el fértil suelo guatemalteco.

Es oportuno decir ahora una palabra de estímulo y aliento a los capitales extranjeros para que funden en Guatemala la industria del agua mineral, sea construyéndose establecimientos balnearios en sus bellas altiplanicies de clima suave, sea exportándose sus magníficas aguas medicinales de mesa.

En cuanto a clima, Guatemala es el paraíso de la América Central.

Solamente el bello y amigo México posee climas iguales a los de Guatemala, como son los de su civilizada capital, de Puebla, de Guadalajara, etc.

Las aguas minerales guatemaltecas son, en general, bicarbonatadas, sódicas y sulfurosas, y de una gran riqueza de ácido carbónico libre y en solución. Las aguas minerales guatemaltecas son frías y termales. Estoy informado de que también existen aguas litinadas y arsenicales. Las aguas ferruginosas son abundantes.

Es de creer que esté muy próximo el día en que la industria minera de Guatemala alcance la cima de su engrandecimiento, tornándose ese país un gran centro industrial en América.

AGRICULTURA Y GANADERÍA.

La industria agrícola es largamente renumeradora en Guatemala, debido a la feracidad de sus tierras.

Los principales cultivos son:

	Quintales.
Maíz (promedio)	12, 670, 613
Café (promedio)	1, 000, 000
Frijol (promedio)	500, 000
Arroz (promedio)	100, 000
Patatas (promedio)	200, 000
Banana (racimos exportados)	2, 500, 000
Azúcar (promedio)	300, 000
Tabaco (promedio)	25, 000
Trigo (promedio)	300, 000
Panela (promedio)	650, 000
Hule (promedio)	6, 000
Chicle (promedio)	18, 000

La industria ganadera, que está próspera, mejora día a día por el cruce con mejores razas, ya seleccionadas, importadas del extranjero. Estoy informado de que en Guatemala se desea establecer en grande escala la exportación de ganado para los Estados Unidos.

Los principales artículos de importación son los siguientes: Hierro, lana, tejidos de seda, artículos de papel y de escritorio, artículos alimenticios, carbón de piedra, drogas y medicinas, artículos de cuero y pieles, artículos de madera y de hierro, vidrio, loza y barro. Tejidos de lino, cáñamo, etc.; tejidos de algodón; maquinarias agrícolas e industriales, etc.; material de ferrocarriles; vinos y cervezas; licores; petróleo crudo y refinado; harina de trigo y madera.

Los artículos que alcanzan una suma mayor en la importación son los tejidos de algodón e hilazas, de donde se saca la conclusión de que las fábricas de tejidos que se montaran en el país prosperarían forzosamente.

De los puertos guatemaltecos el más importante es Puerto Barrios, que presenta un 33 por ciento. Para el puerto de Champerico corresponde el 26 por ciento; para el de Ocós, 18 por ciento; para el de San Jose, 17 por ciento; y para el de Livingston, 6 por ciento. Los Puertos del Pacífico representan el 59.69 por ciento; y los del Atlántico el 38.18 por ciento.

El día en que haya el servicio de navegación con la América del Sur, nuevas relaciones comerciales y morales se dilatarán en los horizontes políticos y comerciales de Guatemala.

CLIMAS.

Guatemala tiene climas diferentes, según la altitud y latitud en que nos coloquemos. En pocas horas puede el hombre pasar del clima tropical de San José al clima templado y verdaderamente delicioso de la ciudad de Guatemala, Quezaltenango, la Antigua Guatemala, etc.

Sus altitudes varían desde 0 al nivel del mar, hasta 4,210 metros, que es la que corresponde al extinto volcán de Tajamulco en el Departamento de San Marcos. El volcán Tacaná, que es notable por ser fronterizo con la República de México, y por la batalla empeñada en el lugar del mismo nombre, durante la revolución liberal de 1871, tiene una altitud de 4,064 metros.

Este hermoso país es bañado por dos océanos en una extensión de 445 kilómetros, correspondiendo 260 kilómetros al Océano Pacífico, y 185 al Atlántico.

Guatemala posee en sus altiplanicies uno de los mejores climas de la tierra; clima bueno por su suavidad, regularidad y constancia. En estos parajes de clima suave, las temperaturas median siempre entre extremos térmicos moderados; esto es, sin los excesivos calores que en otras partes matan de insolación y sin los intensos fríos que tornan la vida difícil y cara en muchas regiones de la tierra.

El clima de Guatemala debe dividirse en clima de litoral y clima de montaña. El clima de litoral es clásicamente tropical, con sus medias de más de 25 grados centígrados, así como el clima de montaña es templado y fresco, con la media anual de 14 a 18 grados centígrados. Tanto el clima de litoral como el de montaña presentan siempre en Guatemala una amplitud moderada, indicadora de su regularidad y constancia.

La colocación del país entre dos océanos, relativamente poco distantes uno del otro, explica tal regularidad, porque los mares son reguladores de los climas. No obstante estar el país confinado entre dos mares, no son demasiadas las lluvias, según se desprende de los interesantes estudios hechos por el sabio Dr. Carlos Sapper. La única explicación que se puede dar de ese fenómeno es la existencia de altas montañas, que sirven más o menos de barreras a los vientos cargados de humedad. Las grandes altitudes que posee el país sirven para mitigar el rigor de la latitud, dando lugar a la formación de un clima verdaderamente agradable y benigno.

Guatemala (la capital), la Antigua Guatemala, Quezaltenango, Sololá, Totonicapan, Quiché, Chimaltenango, etc., son lugares de clima verdaderamente delicioso, adecuados no raramente a sanatorios y a estancias de verano para los países cálidos que circundan la próspera República.

He tenido la ventura de recorrer recientemente casi todo el país, y traigo de mi viaje una impresión que durará toda mi vida, pues Guatemala es uno de los más bellos y más deliciosos pedazos de la tierra.

De mi reciente viaje a este bello y civilizado país, en afectuosa visita a su ilustre Presidente, el Excmo. Sr. Licenciado D. Manuel Estrada Cabrera, me ha

llamado vivamente la atención un mapa en relieve, de la República, mandado hacer por su actual mandatario, para que queden bien precisos, delineados y marcados los límites del territorio nacional, de manera que todo ciudadando guatemalteco conociera gráficamente donde empieza y donde acaba el suelo de su patria.

Este interesante mapa en relieve es un verdadero monumento erigido por el Sr. Estrada Cabrera, imperecederamente, a la integridad territorial de Guatemala.

MONTAÑAS Y VOLCANES.

Guatemala es la tierra de los volcanes. Imponente es el espectáculo que el forastero contempla desde la Antigua Guatemala y desde Escuintla, presenciando tres volcanes que se perfilan y se proyectan sobre el zafiro de un cielo rico de sol, dejando en el espíritu del observador la impresión de tres inmensos gigantes en marcha. Esos volcanes son: El Acatenango, el de Fuego y el de Agua.

Fué este último el destructor de la antigua capital de Centro América, que fué en su tiempo una de las más bellas metrópolis coloniales, como dan testimonio sus imponentes edificios y monumentos en ruinas, cuya gran belleza ni el tiempo ni los cataclismos han podido del todo destruír.

Bello volcán el de Agua, masa cónica truncada, de admirable regularidad, que se destaca a distancia por la pureza de sus líneas geométricas, como una gigantesca pirámide natural, en el ambiente siempre luminoso de este país de sol. Guatemala tiene volcanes extintos, volcanes en actividad y volcanes en formación. No pocas veces los habitantes de este bello y extraordinario país ven crecer inesperadamente en decenas y centenas de metros sus montañas, empinadas y sacudidas por las convulsiones sísmicas.

Entre los volcanes en reciente actividad podemos citar el de Santa María, en el Departamento de Quezaltenango, de 3,500 metros de altura, que dos veces visitamos; el cual, silencioso desde tiempos inmemoriales, se hizo oír en el terremoto de 18 de abril de 1902, que dejó en ruinas la ciudad de Quezaltenango, la segunda de la República y también de la América Central, y que en la erupción posterior sepultó en una lluvia de cenizas y piedra pómez muchas propiedades valiosas.

El celo, la energía y la laboriosidad de los quezaltecos, rápidamente reedificaron la ciudad destruída, haciendo surgir victoriosamente de entre las masas eruptivas las ricas y grandes haciendas y plantaciones de café, para las cuales han sido un abono fecundo las cenizas de la erupción.

Los Andes atraviesan la República en una diagonal N.O.–S.E., en la distancia media de 16 leguas del Océano Pacífico; y emiten para el este, como ramales más importantes, los de las Minas, Santa Cruz, Chawa, Coksconili y Meredón.

Arrancad un pedazo del suelo de Java, la más volcánica de la volcánica Oceanía y transportadlo al centro del continente americano; arrancad otra porción del subsuelo de la Mesopotamia, asiento del paraíso; surcad ese suelo de ríos inmensos y de mansos y tranquilos lagos; bordad esas tierras por una Flora virgen como antes del Diluvio y opulenta como la del Brasil, y tendréis una idea precisa de la encantadora Guatemala.

HIDROGRAFÍA.

La cuenca hidrográfica del país presenta dos fases: la meridional que lleva sus aguas al Océano Pacífico y la septentrional que las lleva a los golfos de Honduras y de México.

Esta última es más importante, y la que nos ofrece como ríos navegables, el sistema del grande Usumacinta que desagua en el Golfo de México; el Motagua, de arenas de oro; y por fin, el Polochic que desemboca en el Golfo de Honduras.

El Usumacinta es navegable desde las cataratas de Tenocique. Su afluente el Río Negro, y el Chixoy, han dado lugar, por su gran comercio, especialmente de maderas, a la reciente formación del puerto fluvial de Izcán.

El Río Motagua es navegable desde Gualán, así como el Polochic lo es desde Panzós, donde los alemanes han construído el ferrocarril de Verapaz a Gualán. En materia de lagos, Guatemala y Nicaragua son la Suiza de la América Central. El bellísimo lago de Atitlán, en el Departamento de Sololá, rodeado de aldeas y pueblos pintorescos y laboriosos, habitados casi todos ellos por indios fuertes y trabajadores, enmarcado por una vegetación exuberante, en medio de la cual extensos y buenos caminos dan acceso al resto del país, excede a todo cuanto de más bello posee la encantadora Suiza.

El lago de Amatitlán, en el Departamento de su nombre, y por cuya orilla pasa el Ferrocarril Inter-Oceánico, cuya conclusión debe Guatemala al Presidente Estrada Cabrera, es una de las más grandes bellezas naturales del país.

De sus orillas elévanse incesantemente densos vapores de las aguas minerales termales que se mezclan con las aguas potables del lago. El laudable celo adminitrativo del actual gobernante de Guatemala, notando la carencia de peces de gran tamaño en esos lagos, hizo establecer viveros de piscicultura que han dado espléndidos resultados.

El más importante de todos los lagos es sin duda el de Izabal, en el Departamento de su nombre, que desagua por el Río Dulce en la bahía de Amatique, en el Golfo de Honduras.

Aprovecho esta oportunidad para rectificar un error geográfico existente en el mapa de Paxke, de 1889, consistente en llamar golfo de Amatique lo que debe ser bahía, y bahía de Honduras lo que debe ser golfo.

El lago de Izabal, el mejor del país, está rodeado de regiones feracísimas.

La excursión por el Río Dulce es una de las más lindas de la tierra; en ambas márgenes—altísimas—la exuberante y lujuriosa vegetación retrata sus caprichos sobre el espejo tranquilo de las aguas.

Grupos de pequeñas islas, entapetadas de alfombras de un verde esmeraldino, preceden a la llegada a las ruinas del histórico castillo de San Fernando, antiguo presidio colonial y centinela que fué contra las invasiones de los piratas del golfo.

No cabe duda que el turismo universal hará, con el tiempo, de esos sitios maravillosos, un punto obligado de *rendez-vous* mundial, que no envidiará los paseos venecianos en la góndola tan poetizada, ni las serenatas del canal, pues a la falta de la suntuosidad de los monumentales palacios de mármol y de las tradicionales costumbres de la capital del Adriático, tendrá el soberbio aterciopelado de los graciosos palmares y de las flexibles y variadísimas lianas.

El Departamento más rico en lagos es el del Petén, que podría con justicia llamarse la región de los lagos de la República de Guatemala. En este Departamento se pueden contar más de veinticinco lagos.

Es esta una región maravillosa y riquísima, de bosques inagotables de maderas preciosas y de suelo fertilísimo, capaz de nutrir sin esfuerzo a millares de inmigrantes, que allí encontrarían un abrigo propicio. Cuando un día las riquezas guatemaltecas estén suficientemente conocidas y aprovechadas, será Guatemala un macrocéfalo, porque el Petén, que ya es cabeza industrial y agrícola del país, se desenvolverá desproporcionadamente con respecto a las otras partes del cuerpo nacional.

Con el tiempo, un ferrocarril llevará inevitablemente a estas regiones la más intensa y fecunda vida moderna.

SITUACIÓN Y LÍMITES.

Guatemala está comprendida entre las latitudes N. 13° y 42′ y 17° y 49′, y entre las longitudes 0 de Grennwich 88° y 10′ y 92° y 30′.

El país está colocado entre México, que le queda al norte y al oeste, y las Repúblicas de Honduras y Salvador, que, con el Océano Atlántico, le quedan al oeste, bañándola el Océano Pacífico por el lado del sur.

Hacia el nordeste de la República está la colonia Británica de Belice, que es un pedazo de territorio de Guatemala ocupado por los ingleses; tierra que aún no desesperamos volverá a integrar la madre patria en futuro no remoto. Sí: es de esperarse que, después de la guerra europea, se inicie en el mundo una época de reparaciones, que permitirá que la liberal y justiciera Inglaterra devuelva a Guatemala, mediante las indemnizaciones debidas, el territorio que a ésta pertenece legítimamente.

Sus límites con México, ya perfectamente demarcados, comprenden el Río Suchiate, que desemboca en el Pacífico y que va a ser atravesado por el puente internacional del Ferrocarril Panamericano.

Sus límites con las Repúblicas del Salvador y Honduras son marcados por el Río de la Paz, que desagua también en el Pacífico, y por el Anguiatu, además del lago de Guija, las montañas del Merendón y Espíritu Santo, y finalmente la desembocadura del Río Motagua, en el Golfo de Honduras (Atlántico).

Sus límites con Belice, igualmente bien fijados, están marcados en el sur por el Río Sarstun, navegable desde las correderas de Gracias a Dios, y que desemboca también en el Golfo de Honduras.

Por equivocación inexplicable, los ingleses llamaron a Belice "British Honduras," lo que es positivamente una inexactitud geográfica, pues el referido territorio fué siempre guatemalteco y nunca hondureño.

La posición estratégica de Guatemala en el Nuevo Mundo, sus riquezas naturales, sus perspectivas de engrandecimiento futuro y el régimen político liberal bajo el cual se halla, tornan ese extraordinario país en uno de los más interesantes del continente, y hacia él debe volverse la atención de los estadistas de América.

II.

UNA LEYENDA INDÍGENA.

América, la Atlántida según el pensamiento de Platón, es uno de los más bellos y vastos continentes del planeta.

Los pueblos aborígenes que han habitado este gran pedazo privilegiado del mundo, han formado para él una tradición que encierra su mayor y más merecida gloria.

No hay hoy quien ignore que, al ser descubierta América, se ha encontrado aquí una notable civilización local, como la de los aztecas en México, la de los incas en el Perú, la de los araucanos en Chile y la de los caraíbas en el Brasil. Estos últimos fueron los mejores navegantes de su tiempo.

El sabio Bescherelle, tratando de la materia, dice con toda justicia que en la época de la conquista europea, una inmensa civilización se extendía por el suelo de las Américas.

México y Perú, afirma él eran dos grandes focos de luz. Un gobierno regular y perfectamente organizado, un desenvolvimiento grandioso en arquitectura,

una habilidad notable en la escultura y en la pintura, nociones astronómicas elevadas, una industria adelantada y un culto pomposo y hasta magnífico, caracterizaban los grandes imperios—el de los aztecas en México y el de los quichuas en el Perú.

Ellos poseían templos, palacios, fortalezas, puentes, canales de irrigación y caminos giganteseos al través de los Andes, uno de los cuales era de 500 leguas de extensión.

Como estos indios eran los kachiquelles, de Guatemala, que han construído la ciudad de Tecpanguatemala, que era su capital y la sede pomposa de su Gobierno.

Entre aquellos aborígenes se encontraban ya el papel, las cartas geográficas, así como planos de catastro, farmacias, armas, cerámica, hoteles, mercados públicos y hasta objetos de arte fino, por ejemplo, mosaicos con pinturas que no eran inferiores, según Bescherelle, a los mejores de nuestros días.

El Brasil ha sido habitado por aborígenes como los omaguas, que eran grandes comerciantes y navegantes, que fueron dueños del estuario amazónico, y a los cuales el ilustre Balbi apellidó "los Fenicios del Nuevo Mundo;" y los caraíbas, que fueron intrépidos guerreros como los araucanos de Chile. Estos últimos han resistido a los mejores ejércitos españoles y chilenos durante más de dos siglos.

En mi viaje por el Perú me ha contado una hermosa quichüa, en frase española lacónica y confusa, mezclada de cuando en cuando de algunas palabras del idioma de su raza, la siguiente interesante leyenda, que ella oyera de la boca de una anciana de su país y que yo he conseguido reconstruir, como el naturalista que reune los huesos dispersos y recompone el esqueleto de un mylodon, coevo del diluvio. Yo era como esos lectores de jeroglíficos que reconstruyen y traducen, con símbolos dispersos y apagados, toda la historia de una época.

He aquí la deliciosa leyenda:

"Cuando los blancos, decía la hermosa quichua, hicieron la guerra en las tierras que están antes de México (Guatemala, ciertamente), la hija del Rey del país apasionóse por un capitán blanco a quien había ido a salvar de la derrota y de la muerte, en la hora en que su pueblo, compuesto de mucha gente, debía atacarlo.

"Poco antes de salir la luna, continuaba la quichua, la princesa llegó a la ruca del 'Hijo de Dios' y le dijo que viniera con ella, que lo cargaría en sus brazos, lo conduciría por camino seguro y le daría presentes valiosos.

"Cuando ella así decía, la luna empezó a salir; y tantos hombres como estrellas en el cielo, han atacado al pueblo de su amado, que partió ligero como la flecha, dejándola sola y prisionera en su propia ruca.

"La princesa, eludiendo la vigilancia de sus centinelas, huyó y corrió campo afuera en medio de la noche, hasta precipitarse en un despeñadero, de donde nunca más volvió."

Al contarme este delicado episodio, la hermosa quichua tenía húmedos los grandes ojos—rasgados en forma de almendra; ojos iluminados por una mirada mansa y compasiva como la de las llamas de su país; y su cuerpecito parecía oscilar como la hoja espalmada de una pequeña palmera del Amazonas, cuando la sacude la brisa.

De lo referido se ve que son innatos los sentimientos delicados en la mujer, y que tanto los experimenta la blanca caucásica de cabellos de oro como moneda nueva, como la salvaje de espalda morena y de cabellos negros como el ala del cuervo.

La América Central, que infelizmente tampoco conocemos, es uno de los pedazos más hermosos y más ricos de nuestro continente, y formada por una

especie de istmo que se extiende del 8° al 17° de latitud norte, en una extensión de 1,500 kilómetros.

Es una porción intermediaria de tierra entre las dos Américas, entre las cuales se extiende como un puente de oro.

Ella está constituída por cinco Repúblicas independientes y cultas, siendo Guatemala la mayor, la más rica y la más poblada.

El suelo y el subsuelo de Guatemala, son de una riqueza y exuberancia prodigiosas. Es sabido que produce abundantemente todos los cereales, y uno de los mejores cafés del mundo. Sus riquezas minerales son enormes; produce oro, plata, hierro, plomo, mercurio, etc. Y son bien conocidos los mármoles, los jaspes, las sulfataras de Guatemala. Su suelo es feracísimo, y de él extraen sus habitantes todos los productos nobles: café, cacao, caña de azúcar, tabaco, algodón, goma, etc., y en sus costas no es raro sean pescados las perlas y los corales.

LA CAPITAL DE GUATEMALA.

Su capital, la ciudad de Guatemala, que es, por su belleza, población y cultura, la metrópoli de la América Central, fué fundada el 1° de enero de 1776 por el Mariscal de Campo Don Martín de Mayorga, poco más de dos años después del terremoto de Santa Marta, que destruyó la antigua capital el 29 de julio de 1773.

Ella está situada en el bellísimo valle llamado de la Ermita de la Virgen, y ha conseguido un gran desarrollo debido a sus vías de comunicación, que la ponen en contacto directo con México y con los Estados Unidos de Norte América, y principalmente a la dulzura y suavidad de su clima, que es uno de los mejores de la tierra.

El actual mandatario de Guatemala ha sabido embellecer, cultivar y mejorar su ciudad, que es tan culta y tan hermosa como cualquier ciudad europea.

OTROS NÚCLEOS DE POBLACIÓN.

Los principales núcleos de población de la República son:

En el centro: Guatemala, capital del Departamento y de la República, a 1,480 metros sobre el nivel del mar, y con 150,000 habitantes: Antigua Guatemala, capital del Departamento de Sacatepéquez, a 1,635 metros sobre el nivel del mar y con 15,000 habitantes; Chimaltenango, cabecera del Departamento del mismo nombre, a 1,651 metros sobre el nivel del mar, con 7,000 habitantes.

En el Sur: Amatitlán, cabecera del Departamento de su nombre, a 1,295 metros sobre el nivel del mar y con 12,800 habitantes; Escuintla, cabecera del Departamento de su nombre, a 384 metros sobre el nivel del mar y con 15,000 habitantes; Cuajinicuilapa, cabecera del Departamento de Santa Rosa, a 989 metros sobre el nivel del mar, y con 5,000 habitantes.

En el Occidente: Sololá, cabecera del Departamento de su nombre, a 2,145 metros sobre el nivel del mar, y con 12,000 habitantes; Totonicapán, cabecera del Departamento de su nombre, a 2,429 metros sobre el nivel del mar y con 40,000 habitantes; Quezaltenango, cabecera del Departamento de su nombre, a 2,262 metros sobre el nivel del mar, y con 45,000 habitantes; Mazatenango, cabecera del Departamento de Suchitepéquez, a 334 metros sobre el nivel del mar, y con 12,900 habitantes; Retalhuleu, cabecera del Departamento de su nombre, a 298 metros sobre el nivel del mar, y con 20,000 habitantes; San Marcos, cabecera del Departamento de su nombre, a 2,200 metros sobre el nivel

del mar, y con 12,000 habitantes; Huehuetenango, cabecera del Departamento de su nombre, a 2,170 metros sobre el nivel del mar, y con 17,000 habitantes.

En el norte: Quiché, cabecera del Departamento de su nombre, a 1,690 metros sobre el nivel del mar y con 20,000 habitantes; Salamá, cabecera del Departamento de Baja Verapaz, a 871 metros sobre el nivel del mar y con 16,000 habitantes; Cobán, cabecera del Departamento de Alta Verapaz, a 1,234 metros sobre el nivel del mar y con 40,000 habitantes; Flores, cabecera del Departamento del Petén, a 147 metros sobre el nivel del mar y con 4,000 habitantes; Levingston, cabecera del Departamento de Izabal, a 14 metros sobre el nivel del mar y con 5,000 habitantes (es puerto del Atlántico).

En el oriente: Zacapa, cabecera del Departamento de su nombre, a 165 metros sobre el nivel del mar y con 22,000 habitantes; Chiquimula, cabecera del Departamento de su nombre, a 379 metros sobre el nivel del mar y con 25,000 habitantes; Jalapa, cabecera del Departamento de su nombre, a 1,470 metros sobre el nivel del mar y con 23,000 habitantes; Juchiapa, cabecera del Departamento de su nombre, a 868 metros sobre el nivel del mar y con 14,000 habitantes; Progreso, cabecera del Departamento de su nombre, al nivel del mar y con 5,000 habitantes.

Hay varios núcleos de menor importancia, como San Pedro de Sacatepéquez en el Departamento de San Marcos, con 16,000; Chiantla, en el Departamento de Huehuetenango con 13,000 habitantes.

La gran mayoría de los núcleos de población están ubicados en bellas altiplanicies, a muchos centenares de metros sobre el nivel del mar, poseyendo por esta razón un clima verdaderamente suave, compatible con la vida del europeo, que en él ya no encuentra los hielos del invierno ni los abrasadores calores del verano de su patria.

Guatemala es uno de los pocos países de América que por su presupuesto con superávit mantiene un perfecto equilibrio fiscal.

El café figura con una cifra superior a $12,000,000 oro.

En estos momentos Guatemala progresa considerablemente, teniendo sus presupuestos acrecentados por el aumento de la producción.

El país está atravesado por ferrocarriles, entre los cuales hay uno que liga dos mares, poniendo a Guatemala en fácil comunicación con el Viejo y el Nuevo Mundo. Sus latifundios han sido transformados en numerosas pequeñas propiedades. La justicia está bien distribuída, y el orden público en todas partes asegurado.

Las históricas e inmensas haciendas que se llaman San Jerónimo y Las Monjas, que por su extensión podrían formar más de un municipio y que eran improductivas, ahora están divididas en numerosas pequeñas propiedades, que contribuyen a aumentar la fortuna pública y aun a mejorar la fortuna particular.

Para caracterizarse la actual Administración de Guatemala, bastará recordar que ella dividió los latifundios, que tanto han contribuído para empobrecer a España, transformándolos en pequeñas propiedades como las que tanto han contribuído a enriquecer a Francia.

El sentimiento patriótico vibra intensamente en el corazón de los guatemaltecos. Su historia política está llena de actos de civismo, de entre los cuales destacamos los practicados por Miguel García Granados y Justo Rufino Barrios en la memorable jornada de 1871 en favor de la Reforma Liberal, y el de Lisandro Anleu, sacrificado en defensa del Jefe de la Nación.

El largo período de paz de que disfruta Guatemala, debido principalmente al prestigio personal de su actual Presidente, el Sr. Estrada Cabrera, ha permitido al país rehabilitar sus fuerzas, reconstituír sus energías y caminar con paso seguro y firme por la vía del progreso.

Auguro a ese bello, extraordinario país, que es habitado por uno de los más viriles pueblos de América, grandes destinos y un puesto de honor en nuestro continente.

III.

Guatemala es uno de los países del continente que goza de mayor estabilidad política y administrativa y de orden social.

Rige al Estado una constitución ampliamente liberal que, con ligeras variantes, es la que fué promulgada en 1879 por la Administración Liberal de Justo Rufino Barrios.

Esa Magna Carta fué el producto de una brillante lucha parlamentaria de los partidos políticos, que pusieron a contribución el saber de sus grandes eruditos y el talento de sus más notables oradores.

Es por esta razón por lo que el estatuto fundamental de Guatemala encierra los más bellos principios de Democracia y Libertad: independiencia de poderes, prensa libre, libertad de palabra, de opiniones, de asociación y cultos, inviolabilidad de la propiedad, de la correspondencia, proscripción monástica, enseñanza obligatoria y laica, responsabilidad funcional pública, reglamentación en el empleo de los fondos públicos, etc.

La más importante reforma traída por la experiencia de los años, fué la derogación del artículo 66, que prohibía le reelección presidencial. Eminentes oradores y publicistas mexicanos y guatemaltecos, llevaron al ánimo de los legisladores, reunidos en Asamblea Constituyente, la convicción de la necesidad de romper los estrechos moldes restrictivos que informaban el referido artículo, substituyéndolo por más amplio criterio, de manera de dejar a los pueblos el derecho de prorrogar su confianza en los hombres que de ella se hayan hecho acreedores con el más incontrovertible de los testimnios: el de los hechos. Realmente, no se debe mudar por lo que puede ser bueno, lo que de hecho ya lo es.

En acatamiento a la referida reforma y a la soberana voluntad de la Nación, debe Guatemala la feliz circunstancia de conservar al frente de sus destinos al Exmo. Sr. Lic. D. Manuel Estrada Cabrera, a quien debe el país las grandes ventajas de la estabilidad administrativa y el orden social de que goza.

El Gobierno de Guatemala, como el de los demás países de América, es republicano, representativo, siendo particularmente unitario y unicamarista.

Acúsase, con palpable falta de razón, de centralizador al Poder Público, porque la influencia administrativa llega a todos los ámbitos del país. Es precisamente esa centralización la causante de la estabilidad política y del mantenimiento del orden social de que gozan los guatemaltecos. Compárese el largo período de paz y de progreso de que ha disfrutado y disfruta Guatemala, con los innumerables y ruinosos vaivenes políticos de otros países, donde gabinetes, gobiernos y revoluciones se suceden como los meses.

La vida de las naciones es como la de los individuos, en la cual la célula se renueva, permaneciendo, sin embargo, intactos los centros motores, que generan la actividad y la fuerza.

La dinámica orgánica es como la de las naciones. Y nunca fué más cierta esta verdad que ahora, con la prodigiosa rapidez de las comunicaciones, que permiten al Poder Público estar al mismo tiempo en todas partes, realizando la ubicuidad, que fué utópica para los dioses, pero que va siendo posible para los hombres.

Esta verdad revélase clara y bellamente en el caso de Guatemala, porque la figura conspicua que rige sus destinos, ha sabido elevar al máximum las ventajas de un sistema que, bueno en sí, en sus manos se ha tornado incomparable.

Guatemala estuvo a un paso de la disolución y de la anarquía el 8 de febrero de 1898, al desaparecer por violencia homicida el Presidente de la República, D. José María Reyna Barrios.

¿Y quién fué sino el Exmo. Sr. Estrada Cabrera el que salvó a la Nación en tan críticos momentos?

Con la Constitución en una de las manos, la bandera de la Patria en la otra, él supo imponer silencio a las ambiciones desencadenadas como un torrentoso mar de fango, restableciendo sólidamente la legalidad.

En aquella coyuntura histórica, el Poder Público era una herencia de Alejandro y una túnica de Nessus.

Las finanzas eran espectros, las malas pasiones rugían como fieras; las ambiciones inmoderadas chispeaban como rayos; las conspiraciones y las traiciones sucedíanse, y la anarquía era como una impetuosa alta marea que amenazaba ahogar a la sociedad a cada momento.

¡Cuánta dosis de prudencia, de tino y de acierto, no se necesitaría para que la maquinaria administrativa no se paralizara por absoluta carencia de recursos de toda especie!

Fué el conjunto de estas cualidades el que pudo llevar adelante y sin interrupción, a través de dificultades y oposiciones sin cuenta, el orden social. Precisábase de un manantial inagotable de energías y de una suma infinita de resistencia para vencer, para vencer, sí, porque la victoria era el lema que encerraba en aquellos momentos históricos la salvación pública.

Felizmente, la corriente de salud y de vida se abrió camino, y, a pesar de todo, la paz se mantuvo a todo trance.

La penuria económica no fué obstáculo bastante para impedir la realización del sueño acariciado durante largos años, del Ferrocarril Inter-Oceánico, que se tornó en una bella realidad, ni tampoco para que el poder público impusiese el debido respeto a la soberanía nacional, revelando el Jefe de la Nación en aquellos momentos todas sus dotes de estadista.

La penuria económica no fué tampoco obstáculo para que la reforma de la instrucción de la niñez viniese a satisfacer una imperiosa necesidad desde largo tiempo reclamada por el país. Desde entonces, la instrucción empezó a propagarse, no solamente dentro de los limitados moldes del doctorado, sino aun invadiendo todos los ramos de la actividad humana.

Se ha puesto a un lado el antiguo preconcepto de considerarse poco honroso el ejercicio de las artes liberales, que han comenzado a ocupar en cada escuela práctica el debido lugar.

Desde entonces, el libro y el martillo han confraternizado como un símbolo de bienestar social.

Sólo conozco en América un hecho que pueda ser comparado a la obra magna del actual Magistrado Supremo de Guatemala: es el del grande Don Pedro II del Brasil, que tomó el Gobierno de su patria, encontrándola asolada por las guerras y revoluciones, y que en pocos años pudo pacificar a la Nación, encaminándola hacia el progreso y engrandeciéndola a tal punto, que, más de una vez, tuvo el Brasil la alta honra de elevar el concurso de sus energías materiales y su prestigio moral, en beneficio de países amigos, defendiendo su paz interna y su soberanía nacional.

En la política continental, el eminente repúblico guatemalteco ha desempeñado un importante papel, que no es tiempo aún de divulgar, y que la historia de los países de Centro América, de México y de los Estados Unidos de América del Norte, sabrán un día serenamente relatar.

La palabra es la trompeta divulgadora de los grandes hechos. Ella transfigura e inspira a los hombres; eleva y engrandece los ideales; fortalece el carácter; refina los sentimientos y retempla las energías y la voluntad.

La palabra es la grande revolucionaria y la gran vencedora de la tierra. La mayor revolución de que hay noticia en la historia de la humanidad, la desencadenó Cristo con cuatro palabras apenas:

" ¡Amaos unos a otros!"

El saber querer, es la nota más saliente del carácter de este grande estadista, que aspira, como el mejor sueño de su vida política, a la amistad estrecha entre todos los países de América.

Nada hay como la voluntad para impeler a los hombres a realizar sus aspiraciones, por grandes y difíciles que ellas puedan ser.

La voluntad es como torrente que abre camino por todas partes y que, cuando está detenida por la esclavitud de los diques, sobrepuja las barreras, vence murallas y se precipita como cascada.

Es la voluntad la que remueve las montañas a paladas, que abre los istmos, poniendo en comunicación a los mares, y que enseña al hombre el camino de la Gloria, sí, de la Gloria, porque la voluntad es el incansable obrero que cimenta el pedestal de todas las estatuas.

Séame permitido, al concluir este modesto trabajo sobre Guatemala, dedicado a la obra meritoria de su actual Presidente, compararlo—recordando su gran labor realizada dentro y fuera de su país a fuerza de vencer obstáculos—a esos peñascos de roca maciza, perdidos en la inmensidad de los mares, contra los cuales las olas envisten, pero que no arrastran.

The CHAIRMAN. We have heard with very great pleasure and instruction this valuable review of the institutions and resources of one of our sister Republics. I am sure I voice the desires of all present when I express the hope that our distinguished visitor, His Excellency the ambassador from Guatemala, will comment briefly upon what we have heard.

Señor MENDEZ. As we have not very much time to-day to speak, I will only express my deep appreciation and say that I kindly thank you and the distinguished doctor, who has been so good as to read his paper—a very interesting document.

Mr. BOTELHO. I am very appreciative of the gentleman's kind words, and thank you.

The CHAIRMAN. There are two more papers remaining yet to be presented by authors who are present—one by Dr. Don Federico Velázquez and the other one by Mr. Lawson Purdy. We shall be very happy to hear now from Dr. Velázquez.

PUNTOS DE VISTA RELATIVOS AL DESARROLLO INDUSTRIAL Y COMERCIAL DE LA REPÚBLICA DOMINICANA.

Por FEDERICO VELÁZQUEZ, H.

Ex-Enviado Extraordinario y Ministro Plenipotenciario de la República Dominicana en Estados Unidos.

El volumen comercial de la República Dominicana durante los diez últimos años ha sido el siguiente: 1905, $9,632,926; 1906, $10,609,309; 1907, $12,830,686; 1908, $14,883,870; 1909, $13,189,010; 1910, $17,333,209; 1911, $18,149,935; 1912, $21,070,478; 1913, $19,368,947; 1914, $17,155,339.

Antes de 1905 la situación del comercio y de la renta pública—de todo lo económico—era desastrosa, porque todos los factores sociales, tanto los políticos

como los económicos, habían perdido el equilibrio que da la acomodación científica de esos factores.

Comenzada a regularizar en 1905 la situación económica, se hizo posible la inmediata regularización de la política, y el resultado obtenido fué un gradual y perseverante aumento del volumen comercial, tanto en la exportación como en la importación, aumento que no tuvo otra interrupción que la sufrida en 1909, con relación al año anterior, debida principalmente a la merma de algunos de nuestros productos de exportación, combinada con la reforma de la tarifa arancelaria, que mantuvo durante algunos meses en la incertidumbre a nuestros comerciantes. El crecimiento duró hasta el año 1912. Ese año, aunque políticamente malo, se destaca como el punto económico culminante del país, porque el impulso productor recibido en los años anteriores y, sobre todo, en 1911, prevaleció sobre las dificultades emanadas de la guerra civil que se inició en las postrimerías de dicho año. Ese impulso, debilitado ya en 1913, dió motivo á una reducción, tanto en los valores exportados como en los importados. En 1914 empezó á renacer el vigor productivo y nuestras exportaciones excedieron a las de 1913, aunque sin alcanzar todavía el volumen de las de 1912; pero a consecuencia del cambio brusco de mercados a que dió motivo la guerra europea, así como al angustioso pesimismo que inspiraba la situación política del país, las importaciones, esto es, los consumos de artículos extranjeros, continuaron reduciéndose.

El heredero forzoso del comercio perdido por Europa durante su bélico conflicto tenía que ser los Estados Unidos de América ya que no sólo dispone del capital necesario, sino que fabrica los mismos productos industriales que acostumbramos importar del Antiguo Continente. Productores nosotros de varias de las materias primas que ellos necesitan, era natural que se constituyesen en mercado de dichas materias primas y nos comprasen la mayor parte de los artículos que antes nos compraba Europa.

El porcentaje de lo que nos compraron los Estados Unidos del total de nuestra exportación, desde 1905 hasta 1913, ha oscilado, más o menos, entre cerca de un 50% y algo más de un 60%, con excepción del año 1910, que fué todavía algo mayor, mientras que en 1914 ese porcentaje ascendió á 81.91%, y en el primer semestre de 1915 á 88.04. En cambio, el de Alemania, que hasta el mismo año se mantuvo muchas veces por encima de un 20%, en 1914 bajó á 7.19 y en el primer semestre de 1915 ha desaparecido por completo. Inglaterra, que hasta 1913 nos compraba hasta algo más de un 2%, en 1914 sólo realizó operaciones de esa clase en una proporción de 0.95%, y Francia que se mantenía casi siempre muy por encima de un 9% hasta 1913, rebajó en 1914 a 2.59%.

Pero el aumento que de ahora en adelante haga el comercio inter-americano ha de ser, por fuerza, muy pequeño, pues aunque los Estados Unidos llegaren a monopolizar, por ventajosos métodos comerciales, todo nuestro actual volumen de compras y de ventas, esas compras y esas ventas se mantendrán por largo tiempo en la capacidad que ahora tienen si no se adopta un procedimiento que, aumentando la actual producción, capacite al pueblo dominicano para adquirir anualmente mayor suma de artículos extranjeros destinados al consumo interior.

Fiarlo todo a la legislación de unos y otros países sería casi ineficaz. La legislación es útil para regular las actividades que han nacido ya o que se encuentran en pleno progreso; pero esa eficacia es mucho menor si de lo que tratan las nuevas leyes es de originar lo que todavía no hay, de despertar iniciativas, de encauzar nuevas energías, de construir, en fin.

Lo que se necesita, principalmente, es que los interesados hagan concurrir su voluntad, su iniciativa, su energía, al fin que se busca. El fomento de

la producción dominicana, base de las operaciones comerciales que pueda desarrollar el país, no se puede realizar mientras la inteligencia y el capital, obrando de mancomún, no remuevan los obstáculos actuales; y esa remoción no se logrará sino cooperando en una misma dirección ambos pueblos.

La República Dominicana dispone de tierras fértiles para multiplicar extraordinariamente su producción actual. Pero ello no se puede lograr con simples prédicas y ni aún con buenas leyes. El obstáculo lo constituyen, en primer término, la escasez de capital y la carencia de buenas vías de comunicación desde casi todo el interior hasta los puertos. Mientras el capital extranjero no emprenda una obra sabia, que a la vez será para él lucrativa, de cooperación, que establezca instituciones de crédito agrícola y construya vías que permitan establecer en las regiones mediterráneas grandes cultivos, el crecimiento tendrá la desesperante lentitud que afectan todos los crecimientos vegetativos, ya sean demográficos, ya sean económicos. Una gran potencia podrá absorber todo nuestro comercio con mutuas ventajas; pero si el pueblo de esa gran potencia no coopera con nosotros sembrando el país de factores de desarrollo agrícola, el comercio no excederá apreciablemente del volumen que actualmente tiene, porque no es falta de voluntad para el desarrollo lo que ahora nos aqueja, sino falta de medios para realizarlo.

Hay un encadenamiento inevitable entre el estado económico y el estado político de cada país. La política influye poderosamente en la marcha económica de la región; pero la economía influye decisivamente en la delineación de la política. Dondequiera que se produce el bienestar económico, el bienestar político surge, al parecer, sin esfuerzo, como un florecimiento espontáneo de las nuevas circunstancias económicas creadas.

Por eso al referirme a las dificultades con que tropieza actualmente el desarrollo del comercio del país no hago hincapié en las políticas. Considero que aumentando el capital y el trabajo y, por lo mismo, el comercio del país, los nuevos intereses creados buscarán en la República más firme centro de gravedad y los actuales errores políticos perderán su eficacia y desaparecerán completamente.

Mi conclusión es que si el capital extranjero coopera con el pueblo dominicano estableciendo institutos de crédito y construyendo vías de comunicación del interior a los puertos, la producción dominicana se multiplicará en pocos años y el comercio aumentará en la misma proporción.

The Chairman. I myself must express personal regret that the pressure of time compels us to limit Mr. Purdy's time in the presentation of his paper, which contains the views on public taxation of a man who now occupies an administrative office in the enforcement of tax law. Without any intimate acquaintance with the conditions that exist in the countries of Latin America, I feel quite safe in predicting that they are now facing, or will soon face, the same problems in the enactment and administration of systems of taxation through which we are now passing. It is a happy circumstance that we have Mr. Purdy with us. I take pleasure in introducing Mr. Lawson Purdy, who presents a paper on the "Assessment of real estate."

Mr. Purdy. I have prepared a paper which it is not my intention to read in full, because it was written with the purpose of affording gentlemen from Central and South America who are interested in

the possible extension of taxes upon real property the advantage of American experience, if it might be of advantage to them. It is my belief that in the near future, more and more, in South and Central America there will be a tendency to turn toward a similar form of taxation to that which to-day furnishes a large part of the local revenue of all the United States.

We in the United States have not developed that system to its perfection by any means. In some States a great progress has been made in certain directions, while in other States the progress has been made in other directions. Some of our States have developed a central power of control, which, in my opinion, is absolutely essential to the uniform and equitable assessment of real estate. In other States, notably in my own, we have developed a reasonably perfect system of local assessments in large cities. That I have attempted to describe in my paper for the benefit of those unfamiliar with the American system and have advocated a system of centralized control which applies equally to the States of the American Union as it does to the States of Central and South America which have adopted our systems.

THE ASSESSMENT OF REAL ESTATE.

By LAWSON PURDY,

President Board of Tax Commissioners of the City of New York.

The American system of taxing real estate has been developed for over 100 years in the United States and Canada. It yields ordinarily considerably more than half of all local revenue. There is practically no demand for its abolition. Methods of assessment have been greatly improved in recent years and agitation and discussion of the subject are wholly concerned with the improvement of administration or the increase of the tax on land. The general plan of taxing land on its capital value seems firmly established for all time.

WHAT THE REAL ESTATE TAX IS.

In England and on the Continent of Europe taxes on real estate are nearly always based on actual or hypothetical rent or on some arbitrary measure, while in the United States the tax is based on the capital value of the property, whether used or not. The appraisal or valuation is called the "assessment." The law directs that real estate shall be assessed at its market value. Various phrases are employed to define market value, as fair cash value, full value, the sum for which the property would be appraised in payment of a just debt from a solvent debtor, or the sum for which the property could be sold under ordinary circumstances.

All real estate is assessed at frequent intervals, preferably annually. The land is assessed, whether used or not, at its market value. Buildings and other improvements are assessed at the amount which they add to the value of the land, which may be far less than cost of reproduction and can never be more except in rare cases. The income may often be the best evidence of value, but

there may be great value and equally high assessment when the income is small. The amount of the tax is determined annually by the needs of the local government. As a rule, therefore, the tax rate varies from year to year. The amount of revenue to be raised is divided by the total assessed value and the result is the tax rate.

THE ASSESSMENT.

Officials who make the assessment are called assessors. The art of assessing demands character, ability, and experience. Assessors should be appointed as the result of competitive examination. They should engage in no other business, should be discharged only for inefficiency or neglect of duty, and should be paid enough to secure the services of competent men. In each city there should be a director of assessments to supervise the assessors. The territory outside cities should be divided into districts of such size as to require at least three assessors, who would be supervised by a director. The State or Province should have a director with power to supervise and control the assessment throughout his jurisdiction. He should have power to order a reassessment, if necessary, and even to make a new assessment through his own deputies or agents.

In each city and district a board must be constituted to hear and act on complaints of overassessment. The director of the city or district should be a member of the board, in order that changes may be harmonious and he may better direct the next assessment.

METHODS OF ASSESSMENT.

To accomplish the best results there should be maps showing each separately assessed parcel of real estate, and each parcel should be described by numbers referring to the map. The tax should be a lien on the land itself, so that payment may be enforced by a sale of the land without any personal proceeding against the owner.

The valuation should be standardized by the use of land-value maps. These maps do not show the separate parcels. Upon these maps should be set down on every side of every block in a city the unit value per front foot for lots of standard size, and in the country in like manner should be set down the value per acre. These maps should be open to public inspection at all times and, if practicable, should be published. The value of the land of each parcel of real estate is derived from the units of value, proper allowance being made for an increased value due to corners of streets and extra depth of lots and for decreased value due to small size, short depth, or bad topography, such as rock or marsh.

A description of the methods in use in the city of New York may furnish useful illustrations of organization, tax maps, land-value maps, and rules for the valuation of land and buildings.

THE ASSESSMENT OF REAL ESTATE IN THE CITY OF NEW YORK.

The head of the department of taxes and assessments is a board of seven commissioners, appointed by the mayor, who hold office at his pleasure. The board of tax commissioners act as a board of review of assessments. Any person aggrieved by the assessment of real estate may make application in writing to the board of tax commissioners to have the assessment reduced.

Assessments are made by deputy tax commissioners. The deputy tax commissioners are appointed by the board of tax commissioners from a civil-service eligible list prepared by the municipal civil-service commission after examination of applicants for the position. Examinations are generally held about once in four years. The questions are of such character as to eliminate about

half the applicants. No one unfamiliar with methods of real estate appraisal can successfully pass the examination. Deputy tax commissioners may only be dismissed from the department for cause by the board of tax commissioners and only after a hearing has been afforded them to explain the charges made against them. When appointed a deputy tax commissioner is paid $2,400 a year. It is the policy of the department, when the appropriation is sufficient, to advance the salaries of deputy tax commissioners $150 every two years so long as their work is satisfactory until they have reached a salary of $3,000 a year; thereafter they may be increased to $3,250 or $3,500; generally, however, only after a very long term of service.

For the assessment of real estate the board of tax commissioners divides the city into districts of appropriate size and assigns a deputy tax commissioner to each district; each deputy so assigned is assisted by a clerk. The districts vary in size and number of separate parcels of real estate to be assessed in accordance with the difficulty of the work and the number of parcels. Where values are very high, as in Manhattan, districts are smaller in area and have a smaller number of parcels than where the values are lower. Where the area is very great, again the number of parcels must be reduced. For 1914 the city was divided as follows:

Borough.	Number of districts.	Average number of parcels.	Average value per parcel.	Average area of each district in square miles.
Manhattan	16	5,881	$50,228	1.38
The Bronx	12	5,496	8,850	3.42
Brooklyn	23	9,271	7,336	3.39
Queens	18	7,451	3,310	6.52
Richmond	6	5,671	2,247	9.53
Total	75	7,221	13,683	4.20

The deputy tax commissioners are engaged throughout the year in studying the districts to which they are assigned and preserving memoranda of all evidences of value they can obtain. The assessment period fixed by law is from the 1st of April to the 1st of October. On the 1st of April each deputy tax commissioner assigned to a district commences his field work and makes his first entry in his field book on that day. The field book is the deputy's notebook and is arranged so that he may have before him the assessments for previous years and the land values for two years. The width of the page of the field book is 15¾ inches and its length is 19¾ inches. The field book contains columns and headings as follows:

Field book, department of taxes

Borough of Manhattan. Section No. ......

Between .... and .... Avenues

Owner or occupant.	Description of property.				House No.	Ward, lot, or map No.	Value of real estate unimproved, 191..-191..
	Size of lot.	Size of house.	Stories high.	Number houses on lot.			
....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....

During the next few days the deputy usually traverses his district, so that he may have the general conditions and changes since the last year in his mind. His first duty is to study the land values and determine from the evidence in his possession where the land-value units must be changed. As he reaches conclusions concerning appropriate land-value units he commences to prepare his land-value maps.

LAND-VALUE MAPS.

The land-value maps are so prepared as to show on every side of every block the value per front foot of lots of standard size and lying normally with reference to the grade of the street. In the suburban sections of the city, where the separate parcels are somtimes of several acres in extent and are unplatted, the unit placed upon the maps represents the value per acre. The standard size of lots in Manhattan, The Bronx, and Richmond is 25 by 100, and in Brooklyn and Queens 20 by 100. Throughout the city the standard depth is 100 feet, and the units always have reference to the depth of 100 feet. If a lot is below grade and worth less than the unit would indicate, the unit nevertheless represents the value that the lot would have if it were on grade. The same statement is true if there should be so much rock on a lot that its actual value is greatly depreciated below the unit. On some streets the lots may all be shorter than 100 feet or deeper; nevertheless the unit represents the value that the lots would have if exactly 100 feet deep. Some blocks are so short that the value of every foot of land is influenced by proximity to a corner; nevertheless, the unit represents the value that a lot would have at that location uninfluenced by proximity to a corner. When the units are thus properly determined, every unit is comparable with every other unit, because peculiarities of depth, topography, and proximity to corners are eliminated and all units are reduced to the same standard.

When the value of any particular lot is determined, proper account is taken of depth, topography, and proximity to a corner; also weight is given to variations from standard size. If a lot is but 50 feet deep, its value would ordinarily be reduced to two-thirds of value that it would have if 100 feet deep, in accordance with the rule in common use known as the Hoffman-Neill rule. This rule assigns a certain proportion of value of a lot 100 feet deep to every depth less than 100 feet. Neither this rule, however, nor any other is regarded as controlling upon the judgment of the deputy. In one section of the city a lot 50 feet deep may be worth more than two-thirds the value of a standard lot and in other sections it may be worth less. The rule is valuable as furnishing a guide to the commonly accepted proportions of value. If a lot is more than 100 feet in depth its value is computed, and the judgment of

and assessment, city of New York.

Volume ...... Block ......

Between.. and ....Streets

1914	1915	1916	1917	1918	1919	Conveyance.	Mortgage.	Remarks.
....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....

the deputy is guided by similar rules. One such rule assigns the following proportions of value to greater depths:

	In addition to value of lot of standard size (per cent).
For the first 25 feet beyond 100 feet	9
For the second 25 feet beyond 100 feet	8
For the third 25 feet beyond 100 feet	7
For the fourth 25 feet beyond 100 feet	6

If the lot under consideration has rock upon it, its value is reduced by some proportion of the cost of rock removal. In some cases there may be sufficient demand for rock to render it probable that the owner of the lot could procure the removal of the rock for less than the cost of removal. In some cases the cost of rock removal would be greater than the value of a standard lot at grade; in such a case it does not follow that the lot has no market value, but its value is much less than the value of a lot at grade.

If a lot is so much below grade as to require filling, its value is ordinarily depreciated by the cost of filling it, but it may be so situated that its value is actually greater than that of a lot at grade, because payment may be obtained for the privilege of using the lot as a dumping place.

The question of the extent to which a lot may be depreciated in value by being above or below grade must be considered with reference to all the surrounding conditions. The unit, however, always represents the value that a lot would have if it lay normally with reference to the grade of the street.

When a lot is situated at the corner of two intersecting streets its value is greater than when it is at some distance from the corner. The appreciation due to its corner position varies in accordance with the relative value of the intersecting streets and the character of the neighborhood. In a suburban section, where the appropriate development is by the erection of detached houses, the appreciation because of corner position may not be more than 25 per cent for a lot 25 by 100; on the other hand, when the lot is at the corner of two streets, both of which are good retail shopping streets, the increment of value of a lot 25 by 100 may be more than 200 per cent over the value of an adjacent interior lot. The appropriate increment of value due to corner position must be considered with reference to the actual earning power and consequent selling value of corner lots in the particular section. The distance from a corner to which the influence upon value of proximity to the corner extends depends upon the character of development appropriate for the neighborhood. Where a lot 100 feet square is the appropriate size for a building the corner influence extends to the whole 100 feet; on the other hand, where a vacant plat 100 feet square at a corner would be improved with four or more buildings, the corner influence extends no farther than the width of the first lot.

Where the appropriate improvement of a section demands lots of standard size, a lot of greater width than standard size has no more relative value than a lot of standard size; but where the appropriate building for that section requires a plat of greater width the larger plat has a greater relative value than the standard lot. In such cases an appropriate addition must be made to the value above that indicated by the unit, according to the size of the particular lot to be valued. In a tenement-house section in Manhattan a lot 37½ feet wide is worth relatively more than a lot 25 feet wide, because a tenement house under the law can not profitably be built on a lot 25 feet wide, whereas an economical tenement house can be erected on a lot 37½ feet wide. In a territory suitable for lofts a lot 50 feet wide is worth more than twice as much as a lot 25 feet wide, and generally a lot 100 feet wide would be worth more than twice as

much as a lot 50 feet wide. The appropriate increase for plottage must be considered with reference to the actual conditions prevailing in the section where the lot is situated. An addition for plottage may be as great as 20 per cent or even more. Conversely, if an appropriate improvement can not be erected on a lot less than 25 feet in width a reduction must be made below the value which would be produced by the unit, varying with the degree of depreciation due to the unusable character of the land in question.

When from all the evidence in his possession a deputy has determined to the best of his ability the unit values throughout his district, it is his duty to prepare his land-value maps and submit them to the deputy in charge of the borough on or before August 1 for transmission to the surveyor. Draftsmen in the surveyor's bureau prepare fair copies of the maps sent in by the deputies, when they are sent to the supervisor of the city record. The supervisor of the city record is the official in charge of the printing department of the city. He procures the publication of the land-value maps in a book 9 inches by 14 inches in size and containing 142 plates. The supervisor causes to be printed 500 copies of the land-value maps for the use of the department, and delivers the plates upon the order of the tax department to the real estate publication known as the Record and Guide. The tax department has an arrangement with the publishers of the Record and Guide, by which they print sufficient copies of the land-value maps to deliver one copy to each of their subscribers free of charge, and to supply the demand for maps by others at the rate of $2 a copy. The purpose of the arrangement with the Record and Guide is the widest possible distribution of the maps to those most interested, in order that the greatest publicity may be given to the unit values fixed by the deputy tax commissioners.

The Record and Guide distributes the land-value maps to its subscribers about October 1, so that they may be ready for use by taxpayers and others during the grievance period.

TAX MAPS AND LOT VALUATION.

When the deputies have determined their land-value units, their next duty is to compute the value of every lot as shown upon the tax maps. The tax maps show the dimensions of every parcel of land in the city. The parcels are numbered by the use of three or more numbers. In Manhattan, The Bronx, and Brooklyn the territory is all divided into sections numbered from 1 up. There are 8 sections in Manhattan, 10 sections in The Bronx, and 25 sections in Brooklyn. The territory is further divided into blocks numbered consecutively from 1 up. Each block is bounded by streets or such permanent boundaries as waterways. The blocks are ordinarily 200 by 800 feet and may contain more than one plot of land entirely surrounded by streets. Within each block the lots are numbered consecutively, commencing at the lower left-hand corner looking north. The numbers run in order east, north, west, and south to the place of beginning. A lot is described as lot 1, block 1, section 1. Such designation imports into the assessment roll the description, dimensions, area, and location shown on the tax maps and on the annual record of assessed valuations.

BUILDINGS AND OTHER IMPROVEMENTS.

It is the duty of the deputies throughout the year to enter in their field books a record of all new buildings obtained from the superintendent of buildings of each borough, also the record of alterations for which plans are filed with the superintendent of buildings. The estimated cost of new buildings or of alterations is filed with the superintendent and reported to the department, and is used for what it may be worth. Its value is little more than an indication of the approximate character of the building or alteration.

When the deputy considers the value of buildings he must take into account the depreciation of old buildings by age and obsolescence which may have taken place since his last assessment. In valuing new buildings he must rely largely upon the approximate cost of reproduction of such buildings. The knowledge of the cost of reproduction is gained by the study of the actual cost of producing certain particular buildings and from estimates of cost obtained from builders, architects, and others. The deputies are guided by the use of factors of value. The factors used by the department are ordinarily the value per square foot of floor space instead of the value per cubic foot of contents. In the case of some of the most costly buildings both factors are used. Ordinarily, however, buildings of the same type differ but little the one from the other in height of floors and in arrangement. The factor per square foot of floor surface is more easily determined and is found to be a reliable mode of comparison. It is obvious that a standard unit must be employed in order that buildings of different size may be compared readily.

The use of a factor enables the deputies and commissioners to compare one building with any other immediately without any further computation; for example, a loft building 50 feet wide, 90 feet deep, and 10 stories high contains 45,000 square feet of floor area. A good loft building can be erected for $2.50 per square foot, and the cost of a loft building of this size would be $112,500. If it became desirable to compare this loft building with another which was 75 feet wide and 85 feet deep, it would be impossible to compare the total value of each without reducing them to a common unit. If it were found that that latter building was assessed at $2.75 and the former at $2.50 per square foot, it would be possible to make comparison at once. The deputies are required to set down in their field books the factor of value of all buildings in order that comparisons may readily be made.

REPORTS.

Commencing June 1 each deputy is required to report weekly until September 10, except during his vacation period, the changes in the assessed value of every lot, together with the aggregate increase and the aggregate decrease for the week. Examiners check these increases for new buildings with the list of new buildings obtained from the superintendents of buildings. The examiners also check all changes of over $1,000 for the attention of the deputy in charge. The aggregate of the increases and of the decreases for the season as reported weekly are computed after the last report, and the total increase must agree with the aggregate of the weekly increases, and the total decrease must agree with the aggregate of the weekly decreases as reported.

Before the 1st of October the annual record of the assessed valuation of real estate must be completed, and on the 1st of October it is opened to public inspection. The annual record contains columns and headings as follows:

Annual record of assessed valuation of

Borough of Manhattan. Section......

Between .... and .... Avenues

Owner or occupant.	Description of property.			
	Size of lot.	Size of house.	Stories high.	Houses on lot.
....	....	....	....	....
....	....	....	....	....
....	....	....	....	....

The width of the page of the annual record is 17½ inches and the page is 21 inches long.

It is the duty of the deputies to examine all properties which have theretofore been exempted from taxation with reference to changes of ownership or condition which may render such property taxable. They are required to make a report of all exempt properties by classes, of which there are about 57.

It is the duty of the deputies and their clerks to count all buildings and to report the number of buildings in each of the 10 classes scheduled in the annual report.

PUBLICATION OF ASSESSMENTS AND OF EXEMPT PROPERTY.

It is the duty of the deputy tax commissioners and their clerks to prepare the copy for the annual publication of the assessments of real estate. This publication is made in May by the board of city record. It is published as supplements to the city record, one supplement for each section or ward. In the entire city there are about 48 such supplements. The publication is a copy of the annual record of the assessed valuation of real estate, omitting only the size of the house and the number of houses on the lot. It is the duty of the deputy and his clerk to read and correct the proof of this publication.

The deputies and their clerks have the further duty in July and August of preparing the copy for the publication of the description and valuation of all property exempted from taxation. They must prepare the copy and read and revise the proof for this publication.

PUBLIC INSPECTION OF THE ANNUAL RECORD.

During the month of October and the first half of November the annual record is open for public inspection, and during that time persons may make application in writing for the reduction of the assessed valuation of any parcel in which they are interested. During this time the deputies attend at the counter on which the books are displayed and answer questions by taxpayers concerning assessed values. They are expected to explain the mode by which the assessed value of any property was reached, exhibiting the unit of land value and the method of computing the value of a particular lot, the factor of value used for the building, and any other information in their possession which the taxpayer may request. In many cases where assessments have been increased the explanation furnished to the taxpayer by the deputy satisfies the taxpayer that his assessment is not in excess of the market value of the property and is in harmony with the assessment of other property in the neighborhood. If the taxpayer is not satisfied and desires to appeal to the commissioners he is given a blank which contains appropriate questions to be answered concerning the character and value of the property. When such

real estate, the city of New York, 1914.

Volume ...... Block No. ......

Between .... and .... Streets

Street. No.	Ward, lot, or map No.	Value of real estate unimproved.	Value of real estate with improvements thereon.	Corrected amount.	Remarks.
....	....	....	....	....	....
....	....	....	....	....	....
....	....	....	....	....	....

applications are filed they are recorded by the deputy in charge of the borough and delivered to the deputy who made the assessment, with instructions to revisit the property and report in writing on the back of the application the facts concerning the property and appropriate answers to the criticisms or objections made by the taxpayer. Upon such a reinspection it not infrequently happens that the deputy revises his judgment and recommends a reduction. If he does not recommend a reduction he is expected to correct the statements of fact made by the taxpayer or explain why his conclusions are erroneous. About December 1 the commissioners commence to hear the applications of persons who asked for an oral hearing by the commissioners. Oral hearings are only afforded when requested. In the great majority of cases applicants for a reduction do not ask to be heard in person.

At the hearings by the commissioners the deputy whose district is under consideration attends with his field book and map prepared to answer questions concerning the assessments under consideration. These hearings continue during the months of December and January. On February 1 the annual record of the assessed valuation of real estate closes, and during February the deputies and their clerks prepare the assessment rolls. The assessment rolls are a copy of the annual record with certain details omitted. All that is really necessary in the assessment roll is the description of the property by lot numbers with the assessed value. The assessment rolls must be finished in February. When they are finished they are signed by all the commissioners. As soon as practicable in February the total assessed values are transmitted to the comptroller in order that the tax-rate ordinance may be prepared for submission to the board of aldermen. The board of aldermen meet on the 1st of March and pass the ordinance fixing the tax rate. Immediately the deputies and their clerks compute the taxes which must be paid in respect of each separately assessed parcel of real estate. For this purpose rate cards are used, which show the amount of the tax on each amount from $1 to $100 and on multiples. In such fashion the computation of taxes is rendered as easy as possible.

During the year the deputies and their clerks prepare new field books, and as early as practicable commence the preparation of the next annual record and new assessment rolls.

REAL ESTATE OF CORPORATIONS.

Two deputies are assigned to the assessment of the real estate of corporations and are assisted by clerks. The class of property thus described consists of all improvements in streets, waterways, and public places other than special franchises, also of all rights of way of public-service corporations which extend throughout more than one block. Where the right of way of a railroad runs into a station or freight house, such property is assigned to the deputy in charge of the real estate of corporations. The deputy tax commissioners are required to report the value of the land of the rights of way of public-service corporations computed in harmony with the value of adjacent land. The deputy in charge of the assessment of this property uses the values so reported to him and adds the value of the improvements, whatever they may be. The deputy in charge of this bureau, moreover, is required to confer from time to time with the employees of the State board of tax commissioners and furnish them with any information in his possession concerning special franchises, and to obtain from the State board any information useful to him in the determination of the value of the property he is assigned to assess.

SPECIAL FRANCHISES.

Special franchises consist of rails, pipes, wires, and the like situated in streets, waterways, and public places, together with the privilege of building, maintaining, and operating the public service performed by the aid of such improvements. The special franchise, therefore, includes both the tangible property in streets and public places of the character described and the value of the privilege of operating it. The State board of tax commissioners assesses special franchises as real estate and certifies the assessments to the local assessors; the local assessors include the special franchise assessments in the local assessment rolls. It is thereupon taxed at the same rate and in the same manner as other real estate. It is the duty of the State board of tax commissioners in assessing special franchises to assess them at their full value and then to equalize such assessments with the other real property in the particular tax district. Thus if the State board finds that other real property is assessed at 90 per cent of its full value, the special franchise assessments are reduced to 90 per cent of the full value found by the State board of tax commissioners.

THE PREPARATION OF TAX MAPS.

At the time the city of New York as now constituted was created in 1898 by the consolidation of the cities of New York, Brooklyn, Long Island City, and other municipalities, the department of taxes and assessments was created, and it was made the custodian of all books, maps, assessment rolls, files, and records relating to assessments which were in use in any of the municipal corporations consolidated. Prior to consolidation in a large part of the territory there were no tax maps at all. Assessments were made as in most country towns throughout the State of New York to-day by arranging in alphabetical order the names of the owners of real estate and opposite the name of each owner a description of the various parcels of land owned by him. By the charter, which applied to the consolidated city, it was provided that assessments thereafter should be in rem, that is to say, against the land itself and not against the owner by name. It became necessary, therefore, to provide tax maps wherever they did not exist, and the charter gave broad general powers for the making of such tax maps and for assessment against the property itself. The deputy tax commissioners were required by the charter to assess each parcel of real estate, giving "street, lot, ward, town, and map number of such real estate embraced within their districts, together with the name of the owner or occupant if known." The department of taxes and assessments was required to appoint a surveyor, whose duty it should be to make necessary surveys and corrections of the ward maps, and also to make all new maps which might be required for the more accurate assessment of real estate within the territory of the city.

In the old city of New York there had been instituted by chapter 166 of the laws of 1890 a system of recording and indexing instruments affecting land. In substance this system was established for the assessment of real estate by chapter 542 of the laws of 1892. This latter chapter provided for tax maps upon which are exhibited in sections and section numbers, block and block numbers, the separate lots or parcels of land taxed within each of the blocks. It is provided that the block once established shall not be changed unless it may be absolutely necessary by reason of changes in the boundary lines. By the act of consolidation chapter 542 of the laws of 1892 was extended to apply to the whole city, but it was not made incumbent upon the tax department to establish the permanent tax maps required by this act immediately. The actual pro-

cedure adopted was to make what are called tentative maps for the suburban territory wherever no maps existed and to use the maps formerly in use wherever they were reasonably adequate for the purpose.

Since consolidation the permanent tax maps have gradually been made until to-day all of the Borough of Brooklyn is permanently mapped and all of the Bronx west of the Bronx River. As yet Queens and Richmond have tentative maps. Permanent maps will not be made in any section until the location of streets has been definitely determined, so that blocks may be laid out with a reasonable prospect that they may continue unchanged indefinitely. The permanent maps are made on a scale of 50 feet to the inch, but the tentative maps covering territory held in large parcels, much of it farm land, are made on a smaller scale, and the scale varies somewhat, being from 80 to 200 feet to the inch.

The division on the permanent map into sections as well as into blocks and lots is advantageous among other reasons for the publication of statistics. The block is so small in area and the number of blocks is so large that comparison of assessment of areas requires a division into larger areas than are contained in blocks. The ordinary block contains about 160,000 square feet, being usually about 200 by 800 feet. The block must always be bounded by permanent streets or water front.

The lots within a block are numbered consecutively, commencing at the lower left-hand corner looking north; starting at that point the lots are numbered consecutively from west to east, then north, then west, then south to the place of beginning. If there is but one lot within the block it bears the number 1. If, thereafter, a small parcel is carved out of the block it is not necessarily numbered 2, but receives the number which it would be likely to receive if the whole block were cut into standard lots.

If a block is divided into lots of about standard size and the lots are numbered consecutively, and thereafter one of the lots is divided, the part of the lot on the side of the lower number retains the old number and the new lot is designated by the same number with a fraction, or the old number with the addition of a letter. When two lots are consolidated the higher number is dropped. As changes occur in lot divisions the tax maps are altered by the use of different colored ink and the addition of the year for which the alteration is made. If two lots are consolidated the dividing line is crossed out by small crosses, a dotted line is drawn in the street in front of the lots in a semicircle to indicate the consolidation, and at the center of that dotted line is inserted the year date. If a new lot is carved out of an old one the new division line is made with a different colored ink and opposite the line the year date is inserted. The tentative tax maps usually have very much larger divisions than the permanent tax maps to avoid the use of arbitrary lines and the splitting of parcels held in one ownership. A territory of considerable area may be designated as a plat, and when that territory is divided the lots are carved out of it and designated by numbers in the same manner as lots are designated within blocks of the size shown on the permanent tax maps. When a territory becomes settled and the permanent street layout is determined, the permanent tax maps are extended over the territory formerly covered by the tentative tax maps, the largest plat is cut into blocks, and those blocks again into lots. When such a change is made cross indices are prepared, so that the lots shown on the tentative maps may be readily identified with the lots shown on the permanent tax maps.

For the use of the tax department there are two sets of maps—one set which is preserved in the offices of the several boroughs, and another set for the use of the deputy tax commissioners to carry with them in the field. The field

maps are bound in volumes of just half the size of the office maps. In the front of the map volumes is placed a key map, made to a scale of from 300 to 700 feet to the inch, showing all of the territory comprised within that volume. The length of all boundary lines is shown on the maps in feet and inches, and on valuable lots of irregular shape the area is shown in square feet. On larger parcels the area is shown in lots or acres.

As the tax maps are the basis of the assessment of real estate, it is above all things necessary that they shall be accurate. The charter provides, in reference to the assessment roll, that "real estate shall be described therein by the numbers by which such property is designated on the tax maps and in the annual record of assessed valuations, and such numbers shall import into the assessment roll of real estate any necessary identifying description shown by the tax maps."

THE ADVANTAGES OF THE REAL ESTATE TAX.

Every Government should employ one form of taxation which can be increased or diminished in accordance with the need for revenue each year. If taxes are relied on exclusively which are levied at fixed, unchanging rates, there is either too little or too much revenue. Too little revenue starves the community or forces borrowing, while too much inevitably leads to extravagance. The tax on real estate is ideally elastic, as the rate can be adjusted annually in accordance with needs. Taxpayers can be relied on to agitate against too lavish expenditures.

A tax on land has peculiar advantages, in that it is like a rent charge for the benefit of the State, and merely retains for the State part of the value which springs from social activity. It reduces capital value and decreases the amount of capital investment required to obtain land for use. It tends to prevent the withholding of land from use when its value shows that there is a demand for it.

It is now universally recognized that the great unused estates in Mexico are in part due to the absence of a suitable land tax; and all parties promise that a land tax shall be inaugurated.

The CHAIRMAN. This concludes the formal series of papers to be presented before the several subsections of our section. I shall ask Mr. Gonzalez if the work of the committee on resolutions has been completed for reference to the general committee on resolutions.

Mr. GONZALEZ. Yes, Mr. Chairman, it has been completed.

The CHAIRMAN. They have no further report to make?

Mr. GONZALEZ. No.

The CHAIRMAN. I will ask the secretary, Mr. Branch, if he has any announcements to make.

The SECRETARY. In accordance with the resolution that was passed the other day I transmitted a copy of that to Dr. Rowe, and he has begged me personally to transmit to the members of Section IX his very deep appreciation of the courtesy that has been shown in the passage of that resolution.

The CHAIRMAN. I shall be glad to recognize any other member of this section for a few minutes if desired. If not, perhaps, I may express the thanks of those who have been unexpectedly, like myself,

called on in consequence of Dr. Rowe's illness to exercise jurisdiction for which they were not prepared nor had expected. All of you, I am sure, realize the labor and devotion which Dr. Rowe has expended in preparing the program of this section, and it was a matter of official regret and even of personal grief to us that just at a time when he was to derive the satisfaction that would come from the fruition of his labors he should have become ill. On behalf, therefore, not only of Dr. Rowe, but of the men who have handled the work of this section, I wish to express the gratitude which the officers feel for your cooperation under somewhat trying circumstances. On behalf of those others here in the United States who are interested in the particular subjects of commerce, taxation, transportation, and finance I can only voice the hope that more intimate opportunities will be afforded for an exchange of experiences.

Such a theme as Mr. Purdy has just announced brings to mind the great value of a sort of round-table conference. You who are certain to represent in the conferences of coming years many of the States of the Americas whose developments we are now traversing must certainly be able to contribute something to the common fund of experience. Of course, after all, a conference is merely designed, I presume, to open up such opportunities for contact and discussions. Out of such acquaintances as have developed, as well as out of some of the other scientific conferences, we may be able to assume these mutually advantageous relations.

Now, Your Excellency and the members of the section, if there is no further business, I declare the proceedings of Section IX formally concluded.

The following papers were presented and read by title at this session:

Commercio estrangeiro entre paizes americanos, by Arthur Guimarães.

La República Centro-Americana de Honduras: sus medios de communicación, comercio, industria y orientación económica actual y para el porvenir, by Antonio A. Ramírez F. Fontecha.

Noticia geográfica y estadística de la República de Honduras, Centro America, by Antonio A. Ramírez F. Fontecha.

The possibility of standardizing census and commercial statistics in the American republics, by S. N. D. North.

Investments of capital in Brazil, by H. C. de Martins Pinheiro.

Peru's financial problem, by Osgood Hardy.

Problema del cambio internacional y medios más adecuados para establecer un cambio directo entre los países del continente americano, by Baron de Franzenstein.

Government monopolies and internal-revenue systems, by Carl C. Plehn.

Protection and nationalism, by Alvin S. Johnson.

The principle of equity in the taxation of foreign corporations, by Fred Rogers Fairchild.

COMMERCIO ESTRANGEIRO ENTRE PAIZES AMERICANOS.

Por ARTHUR GUIMARÃES,
Consul do Brasil em Argel.

O Brasil, com 25 milhões de habitantes (ultimo recenseamento, de 1900) e uma superficie de 8,497,540 k. q. não está sequer proximo do desventramento de todas as suas riquezas, a que forçosamente attingirá, pelo povoamento, pelo capital estrangeiro, pelo trabalho, por adequada utensiliagem e pelo criterioso aproveitamento de todos os seus recursos naturaes.

Nosso commercio, o distribuidor d'essas riquezas, tem sido de preferencia feito com a Europa, o que se justifica na constancia de tradições, que a ella sempre nos ligaram e nas crescentes facilidades de credito, de transporte, de capitaes, de efficiencias e de capacidades technicas, que de lá nos vieram; mas é intuitivo que, pela força das circumstancias, somos obrigados a assentar novas bases de vida commercial, sem o proposito de faltar aos deveres de ordem moral e material creados com o outro lado do Atlantico.

A Europa estuda com antecedencia o problema economico futuro, de quando terminada a guerra; nós, naturalmente, teremos que agir, se não no sentido de tirar proveito das deslocações já iniciadas ou imminentes, pelo menos no de rumar para porto e salvamento. O ouro e o braço, de que tanto hemos mister, a Europa vae avaramente reter, poupar, guardar; e a sua politica economica possivelmente soffrerá grandes transformações.

Suggerem os economistas alvitres, lembram medidas tarifarias preventivas e defensivas, quando não aggressivas; os governos, occupados com a conflagração, não se despreoccupam das defezas commercial, agricola e industrial, provendo e prevendo, tanto quanto possivel, o futuro de seus paizes.

O Brasil, deante d'este quadro vivo e de taes alterações em marcha, não pode nem deve cruzar os braços, e para começar precisa e só tem motivos para pôr-se em melhor e mais amplo contacto com as republicas americanas, o que não envolve desconsiderações aos velhos clientes europeus, cujas relações continuará a prezar e manter.

Pelo que toca a transportes, primeiro objectivo a collimar, não ha como os paizes americanos reforçarem e melhorarem suas marinhas mercantes, sob a *leaderança* norte-americana, que a ella tem incontestavel direito, pelos recursos de que como nenhuma outra nação d'este continente dispõe; mas não se limitando á rapidez e sim á accessibilidade dos fretes, dos seguros, da apparelhagem technica, do conjuncto de aperfeiçoamentos que caracterisa a navegação européa.

A America do Norte, que tudo pode e sabe fazer, melhorando os transportes, deve melhorar tambem a qualidade dos productos e fabricação dos artefactos, medida complementar n'essa face do problema.

Praticos que são, certamente já o estarão fazendo, seguindo os passos seguros e trilhando o caminho desbravado pela Allemanha, cujos methodos usados na introducção e na circulação dos productos, bem como na procura de novos mercados, ficaram modelares e tiveram brilhante exito universal.

O de que carecemos é da cooperação cá dentro d'esses elementos que, a troco de vantagens, nos dêem conhecimentos technicos capazes de nos transformarem. E só assim, com o factor tempo e as lições dos competentes, poderemos attingir á organisação indispensavel aos povos que querem viver.

Entretanto, pela pressão dos factos, temos que agir e agir já, para não succumbir.

Como?

Apparelhando-nos internamente: a) revendo as tarifas em geral, mas aduaneiras primacialmente, no sentido livre-cambista; b) promovendo e additando novas clausulas aos tratados commerciaes, na medida do possivel; c) defendendo e augmentando a nossa producção; d) estudando e lançando as bases de conquista de novos mercados, possiveis nas deslocações oriundas da grande guerra; e) acceitando os cabos que nos queiram estender os europeus, na restauração de seus intercambios.

O que desejamos é que a America do Norte nos faça um dos alvos da sua expansão, que o momento europeu favorece.

A prosperidade dos Estados-Unidos precisa do Brasil, como de todos os povos americanos; mas nós precisamos muito mais dos Estados-Unidos do que elles de nós, que são os nossos melhores freguezes.

A logica manda que façamos com a grande nação politica de attração commercial, e d'esta as bases acham-se assentadas nas explanações e recommendações proficientes do nosso delegado na Conferencia Financeira de Washington e demais membros que a ella concorreram.

Resalta, entre as recommendações da Sub-commissão do *Committee* do Brasil, a que propugna o estabelecimento d'um systema de cambio directo entre os Estados-Unidos e a America Latina, baseado no dóllar, como unidade, como viga-mestra d'um edificio grandioso a ser levantado.

As demais são todas convenientes, importantes, intelligentes.

O Americano do norte, cá dentro, no mundo bancario, no commercio, nas industrias, seria o dóllar concorrendo com a libra esterlina, e um poderoso tonificador do nosso organismo, transitoriamente desfallecido.

Contribuindo os nossos publicos poderes federaes, estaduaes, e municipaes com o que estivesse na sua alçada, facilitando taxações, installações, concessões, o contacto resultaria proficuo e prosperariamos mutuamente.

O limitado conhecimento que a America do Norte tem do Brasil desappareceria, como aliás está sendo reduzido aos poucos pela observação, pelas impressões, pela visão dos viajantes e visitantes aqui aportados.

Theodoro Roosevelt e Elihu Root levaram na retina as possibilidades d'um Brasil a transformar-se.

Todas as nações porfiam na supremacia commercial, norteadas pelo neo-mercantilismo germanico.

A evolução commercial dos Estados-Unidos já attingio a um gráo elevadissimo—o petroleo, o algodão, o ferro e mais productos provam-no bem.

Nos artigos fabricados, o combate está no auge e, quando vencedores, "todas as nações do globo dependerão d'esse mercado-monstro, que se tornará o regulador de todos os outros."[1]

Como os allemães fizeram as clientelas, Poinsard nol-o diz: "multiplicando succursaes, depositos, museus de mercadorias e expedindo representantes e viajantes, para *in loco* estudarem os gostos, as conveniencias, as peculiaridades de cada povo e zona, revestindo de agradaveis aspectos os acondicionamentos, facilitando longos prazos nas vendas e concedendo creditos e condições de pagamento suaves e attrahentes."

Repetir-se-ha o feito assimilado o processo, sob a *empreinte yankee*, que é a do arrojo, da audacia, da perseverança nos grandes emprehendimentos.

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[1] Léon Poinsard, La production, le travail et le problème social.

A. de Tocqueville, em *La Democratie en Amérique*, fez o elogio dos norte-americanos n'estes termos que se nos afiguram exactos: "Naufragam muitas vezes, mas não ha navegadores que atravessem os mares mais rapidamente do que elles, insensiveis aos perigos. Fazendo o mesmo que os outros em menor tempo, ipso-facto realisam as cousas com menor dispendio." E Paul de Rousiers, em *La vie américaine*, confirma o conceito: "O americano é o que melhor triumpha na lucta quotidiana, sabendo dirigir sua actividade, abrindo territorios, fundando cidades, construindo estradas de ferro, creando manufacturas." E, mais adeante: "provando que tudo é possivel, e que a audacia é uma sabedoria."

E Moreau, em *Les Etats-Unis* (citação de Poinsard) informa que, perguntando a muitos americanos quaes as suas occupações, obteve esta resposta quasi uniforme: "Faço negocios; não tenho nenhum, tenho todos."

Ora, tal cooperação de musculos e nervos, muito não é que a requestemos insistentemente.

O *Jornal do Commercio* de 28 de agosto proximo-passado, publicou um artigo contendo as impressões d'um viajante brasileiro recentemente chegado da Europa, replecto de sensatos conceitos.

Em certo momento, exclama: "Um paiz que produzio os bandeirantes e conservou intacto o seu territorio contra a cobiça estrangeira, mau-grado o littoral desguarnecido, possue reservatorios de energias, que cumpre despertar."

Nosso delegado na Conferencia financeira pan-americana e um dos nossos vice-presidentes, Sr Dr Amaro Cavalcante, no relatorio que acaba de apresentar ao Exm^o Sr Ministro das Relações Exteriores, deu prova de que assim é, revelando-se consummado financista e emerito patriota, no tacto e proficiencia com que elucidou as questões affectas ao grupo do Brasil.

Não ha como fecundar-lhe a bôa semente.

Thorold Rogers,[1] em relação á Inglaterra, disse isto: "Ao receber, com indifferença, a primeira partida de algodão americano, em Liverpool, M. Rathbone não podia prever que essa primeira e insignificante consignação era o germen d'uma prodigiosa industria algodoeira que iria cobrir o sul da Escocia e o norte da Inglaterra."

Com o café, o Brasil experimentou o mesmo prodigio: os primeiros cafeeiros aqui recebidos foram o germen d'uma grande riqueza.

A expansão do Commercio entre as Americas é uma consequencia da grande guerra. Inutil seria impol-a por leis. Os homens praticos da Norte-America saberão inaugurar a nova era.

LA REPÚBLICA CENTRO-AMERICANA DE HONDURAS: SUS MEDIOS DE COMUNICACIÓN, COMERCIO, INDUSTRIA Y ORIENTACIÓN ECONÓMICA ACTUAL Y PARA EL PORVENIR.

Por ANTONIO A. RAMÍREZ F. FONTECHA,
Ex-Rector de la Universidad Central de Honduras.

". . . Las deplorables circunstancias en que se ha encontrado desde la Independencia (Centro América), han sido bastante desfavorables para toda clase de investigaciones, aun en los ramos geográfico y estadístico. Todo lo que pertenece a la historia, caracteres naturales, clima, población, producciones, comercio y riqueza del país, está en una ignorancia casi completa. Aun las personas que se supone estar mejor instruídas sobre las peculiaridades del país, no son capaces de dar un informe circunstanciado y exacto acerca de

[1] *Interprétation économique de l'Histoire.*

ellas y el investigador tiene que sujetarse a su propio trabajo, tan penoso y difícil, que no deja de desalentar. En vano se buscan libros impresos o documentos que lo ayuden. De los pocos que pude recoger, no hay una sola colección completa y en vano se buscan también datos en los archivos públicos, donde un total abandono y falta de orden hace imposible adquirir ninguno. . . ." E. G. Squier; "Honduras"—"Descripción histórica, geográfica y estadística de esta República de la América Central." Londres 1865.

El ilustre representante de los Estados Unidos de América en los Estados de la América Central, en los primeros días de la segunda mitad del siglo anterior, Mr. Squier, escribía en la introducción de su libro titulado "Honduras", quince años después, lo que se ve en las líneas que anteceden. Según ellas, todo lo que se refería a Centro América y por consiguiente a Honduras, estaba envuelto en las tinieblas de la ignorancia y del abandono, por lo que era muy difícil, si no imposible, obtener dato alguno exacto; pero ni siquiera aproximado a la realidad acerca de aquella región del continente americano, muy especialmente si se refería a su historia o a sus caracteres, bajo todos los aspectos que interesara considerarla, muy particularmente bajo los de la Geografía Comercial y aun de la misma Física y Política y mucho más todavía cuando se trataba de la ciencia de la Estadística, considerada como superflua y como cosa de curiosidad únicamente; pero no como la fuente de donde se originan las leyes que rigen el progreso humano.

No obstante haber transcurrido medio siglo desde que Mr. Squier hizo las apreciaciones copiadas, por desgracia éstas resultan todavía de completa actualidad. Al redactar recientemente una "Noticia Geográfica y Estadística de la República de Honduras," he luchado con los mismos inconvenientes que Mr. Squier, como si el tiempo no hubiera hecho su camino, desde la publicación de la obra mencionada. Así que la Noticia aludida, adolece del carácter de improvisación y de falta de detalles que necesariamente ha debido tener, con datos casi embrionarios y siempre deficientes, a pesar de que es de justicia confesar que Honduras ha dado un paso de gigante, últimamente, para el planteamiento en su territorio de trabajos estadísticos en realidad apreciables y de verdadera utilidad.

Pero deficientes y todo los datos de que he podido disponer, bastan para dar una idea aproximada de lo que es aquella República y del extenso campo que ofrece para que en él encuentren ocupación remuneradora el capital y la actividad disponibles en este país para empresas en el exterior.

MEDIOS DE COMUNICACIÓN.

I. TRANSPORTE.

Honduras, en este ramo, es enteramente deficiente desde cualquier punto de vista que se la considere.

(A) TRANSPORTE POR EL OCÉANO.

Honduras no tiene marina mercante propiamente dicha. Su comercio con el exterior se hace, con los Estados Unidos, directamente por medio de vapores con bandera hondureña, americana y noruega, dedicados especialmente al comercio de frutas y poseídos por las mismas empresas dueñas de plantaciones en Honduras y que a su vez compran la fruta a los hacendados que la cultivan en el país, en gran número americanos, para exportarla por su cuenta a los Estados Unidos. Estos buques, que parten y regresan de y para Nueva Orleans, Mobila y Nueva York, llevan también la carga de y para Honduras y hacen el servicio de pasajeros y además el regular del correo.

El Gobierno ha dado concesiones especiales para estas empresas. No consisten en subvenciones en dinero efectivo; pero sí en privilegios que tienen su valor comercial, tales como autorización para cargar y descargar a cualquier hora del día y de la noche en los puertos de Honduras; exención de impuestos de anclaje, faro, etc., con otros privilegios especiales en casos determinados.

El comercio con Europa se hace indirectamente; es decir, enviando la carga a puertos intermedios: Panamá, Salina Cruz, etc., de donde la toman los buques trasatlánticos para conducirla a su destino. En la actualidad la guerra ha paralizado casi por completo el mayor comercio europeo que se hacía con Alemania, continuando activamente el comercio con los Estados Unidos, el que aumentaría más aún indudablemente, si en el Pacífico se establecieran una o más líneas regulares de vapores, con los puertos americanos de California, y para los del Este, por medio del Canal de Panamá, con fletes a precios razonables y con salidas y llegadas fijas. Los Estados centroamericanos han padecido a la Pacific Mail Steamship Co. durante largos años, de tal manera, que cualquiera otra compañía que ha llegado a hacer el tráfico de la misma línea, como la alemana Kosmos, bien pronto ha asegurado fletes y pasajes, no obstante la lentitud de los viajes y la poca comodidad de los barcos.

(B) FERROCARRILES INTERNACIONALES.

En Honduras no existen hasta la fecha. El Congreso de 1913 aprobó una concesión hecha por el Gobierno a don René Keilhauer, concesionario a su vez del Ferrocarril Transcontinental de El Salvador, para construir la parte de esta empresa correspondiente a Honduras, desde su frontera occidental con El Salvador a la oriental con Nicaragua. El concesionario habría de construir la línea y dotarla del material rodante necesario para su explotación, por su propia cuenta, dándole el Gobierno sin gravamen alguno, el terreno necesario para la construcción de casas, talleres, oficinas, estaciones, etc., que fueran necesarios para la empresa, con una faja de terreno de 50 metros de anchura a todo lo largo de la línea, excepto en su tránsito por poblaciones, en las que sería reducida la dicha faja a lo estrictamente necesario. También cedió en propiedad 250 kilómetros cuadrados de terreno nacional, en lotes alternados con otros del Gobierno de igual extensión, por cada kilómetro de vía construido.

La empresa estaría exenta además del pago de derechos aduaneros por todo el material que importara para la construcción del ferrocarril, herramientas, etc., incluso provisiones de boca y trajes de trabajo para sus operarios y empleados. También se concedió a la empresa exención para los buques que llegaran a los puertos hondureños con material u otros de los artículos exentos de impuestos para la empresa. Por desgracia, la guerra europea que en todas partes ha dejado sentir sus consecuencias, ha retrasado la realización de esta empresa, cuya línea pondrá a Honduras en comunicación con sus otras hermanas de Centro América, y con Méjico y Estados Unidos por medio de la República de Guatemala.

(C) DESARROLLO DE LOS FERROCARRILES INTERIORES.

Fué Honduras el primer país centroamericano que intentó la construcción de un ferrocarril interoceánico. En los días en que se discutía la construcción del ferrocarril de Colón a Panamá y la línea por el istmo de Tehuantepec, también se estudiaba la posibilidad de tender una vía férrea por territorio de Honduras, desde el Océano Atlántico al Pacífico.

Fué el ciudadano americano y representante diplomático de los Estados Unidos en Centro América, Mr. E. Geo Squier, quien, en 1850, concibió la idea de tal construcción y en 1852 trató de llevarla a cabo, constituyendo, con varios

amigos suyos y hombres de negocios que levantaran el espíritu público en favor de la empresa, una compañía que procediera primero a reconocer la factibilidad del proyecto y después a su realización. La comisión técnica salió de Estados Unidos en febrero de 1853; en abril siguiente comenzó sus estudios y el 23 de junio de 1853 se firmó el contrato entre los representantes del Gobierno y el de la Compañía formada por Mr. E. Geo. Squier, para la construcción del proyectado ferrocarril interoceánico.

Tal empresa fracasó, debido, entre otras causas, a los trastornos ocurridos en Méjico y Estados Unidos con la intervención europea en el primero y la guerra separatista en éstos, no obstante que, en 1858, una comisión técnica inglesa estudió la ruta y dió sobre ella informes muy halagadores; pero lo cierto fué que la existencia ya del ferrocarril de Panamá relegó a puesto muy secundario, la conveniencia y aun la posibilidad de la construcción del de Honduras.

Fracasada la dicha empresa y disuelta la compañía americana, después de una vana tentativa de dar entrada en ella también al elemento europeo, el Gobierno hondureño, en su deseo de llevar a cabo la empresa, e inducido a ello por consejeros más o menos interesados, y por un sentimiento, si equivocado, también patriótico en el más alto grado, intentó realizar la construcción del ferrocarril interoceánico por sí mismo, mediante la emisión en Europa de un empréstito cuyos productos se destinarían a tal construcción.

La emisión de este empréstito que fué por 1.000,000 de libras esterlinas nominales, se verificó en Londres, en julio de 1867. El resultado de este empréstito fué desastroso, y sin que estuviera cubierto sino en una parte muy insignificante, los representantes del Gobierno hondureño emitieron en París un nuevo empréstito de casi 2,500,000 libras, en 1869, y al año siguiente de 1870, otro en Londres, también de 2,500,000 libras nominales.

No es la índole de este trabajo a propósito para entrar a analizar cada uno de estos empréstitos, ni su inversión, que en realidad es ignorada, el primero por el Gobierno de Honduras, víctima, como los primitivos tenedores de estos bonos, de la rapacidad de intermediarios sin escrúpulo alguno para apoderarse de lo ajeno; pero sí diremos únicamente que tan inmensa suma nominal como representa el total de los empréstitos, no alcanzó más que para construir *cincuenta y tres millas de vía férrea*, o sea la primera de las tres secciones en que se dividió el proyecto del ferrocarril interoceánico por Honduras.

Muchas tentativas se han hecho para continuar esta línea, cuyo carácter actual y destino han variado por completo. Antes estaba destinada a servir para el tránsito de las mercancías y los viajeros de un océano a otro, por lo que sólo debía atenderse a hacer la vía lo más corta posible, sin considerar para nada el tráfico interior; en tanto que, en la actualidad, por el contrario, el trazado de la línea debe obedecer al mayor desarrollo que pueda resultar de ella para la producción y el comercio interior, en relación con el comercio de Honduras con el exterior, a cuyo desenvolvimiento contribuirá poderosamente. El Gobierno ha construído recientemente, con sus propios fondos, en esta vía, un puente de hierro sobre el río Ulúa, con un costo total de $185,994.12½ centavos.

Varias otras líneas de ferrocarriles existen en el país o están en construcción; pero en su casi totalidad pertenecen a compañías que negocian en frutas tropicales, estando casi exclusivamente destinadas a su servicio.

El ferrocarril de Vaccaro Bross & Co., empresa frutera establecida en La Ceiba, que hace el tráfico con Nueva Orleans, tiene construídos 137 kilómetros de vía férrea, efectuando el servicio de carga y de pasajeros, además de llevar la fruta que exporta, propia y que compra a particulares, la compañía constructora.

El ferrocarril de la Tela Railway Company tiene ya 47 kilómetros terminados. El de la United Fruit Co. 12 kilómetros y la Honduras Rubber Co. 9½ kilómetros únicamente. La Cuyamel Fruit Company 24 kilómetros y la E. P. Morse Timber Company Limited comienza sus trabajos con 8 kilómetros de terraplén únicamente, hasta ahora.

En construcción existe también la vía férrea que partiendo de Trujillo, en la costa del Atlántico, irá a terminar en Juticalpa, cabecera del departamento de Olancho. Esta línea, según el decreto de su concesión, aprobatorio del respectivo contrato, debe llegar hasta Tegucigalpa, capital de la República, lo que será de gran importancia para el desarrollo de la riqueza agrícola, pecuaria y también minera, en vastas y hasta hoy incultas regiones de la República.

En este ramo de ferrocarriles, Honduras ofrece campo extenso para capitalistas y empresarios; pero es preciso también que los hijos del país se convenzan de que el solo esfuerzo del Gobierno no puede conducir a la terminación de línea alguna de las proyectadas, y menos a la de la gran vía interocéanica. El 1873 fueron suspendidos los trabajos de ella, realizados con los fondos de los empréstitos de Londres y de París, y desde entonces, o sea en un lapso de *cuarenta y dos años*, no se ha podido construir un solo kilómetro. El puente de Ulúa, ya mencionado, representa un esfuerzo gigantesco de parte del Gobierno y da la medida de lo que puede ciertamente hacer una administración económica y honrada; pero eso no resuelve el problema. Faltan por construir doscientas ochenta millas próximamente, las que el Estado no podría terminar jamás, con su solo esfuerzo, pues además debería atender constantemente a la reparación de la parte de línea construída y en explotación, y a la conservación, reposición y aumento del material rodante.

Existe cierta prevención entre los hondureños respecto a la concesión de tierras a los extranjeros, única subvención que puede dar el Gobierno a los ferrocarriles, prevención hasta cierto punto justificada por lo que ocurre en otras naciones, y aun en Honduras mismo, bajo otros aspectos; pero no debe olvidarse que las tierras no son muebles que se pueden transportar o hacerse desaparecer; y que, al cederlas, no se enajena con ellas la jurisdicción política, la soberanía que el Gobierno ejerce y seguirá ejerciendo sobre ellas, y sí adquieren valor, desde el momento en que se someten a un cultivo, a una ocupación que las hace productivas. Las concesiones de tierras, repetimos, son las subvenciones únicas que Honduras puede dar a las empresas ferrocarrileras. En tanto que para ellas no haya un espíritu ampliamente liberal aunque previsor al mismo tiempo, sus terrenos permanecerán incultos y por consiguiente improductivos, siendo eso rémora también para que puedan ponerse en valor los productos naturales existentes en allos, de grandísima importancia actual y mayor aún para el porvenir.

(D) PUERTOS, VÍAS ACUÁTICAS TERMINALES E INTERIORES.

Honduras, en este ramo importantísimo, nada debe al arte ni al trabajo del hombre. Sus puertos son los que la naturaleza ha puesto en sus costas; algunos, como el de Puerto Cortés, en el Atlántico, y de Amapala, en el Pacífico, son de los mejores de Centro América, región donde no abundan los buenos puertos, siendo en su mayoría los que se utilizan radas abiertas, combatidas por los vientos, sin obra de arte alguna que los defienda de ellos.

En los puertos de Puerto Cortés y de La Ceiba, existen muelles de madera a los que pueden atracar los buques de mediano tonelaje, facilitándose así la carga y descarga de mercancías. En el puerto de Amapala el muelle que existe no es lo suficientemente largo para que puedan atracar los barcos.

Todas las empresas concesionarias de ferrocarriles cuyos puntos terminales son puertos, tienen en sus contratas la obligación de construir muelles en dichos puntos y el derecho de cobrar un pequeño impuesto, cuyo producto, deducidos los gastos de entretenimiento y mejora, se distribuye entre el Gobierno y la empresa concesionaria.

También la construcción de estos muelles, pero con carácter definitivo y la de puertos artificiales y otros obras de defensa, pudiera ser una inversión remuneradora para el capital extranjero en Honduras.

En cuanto a la navegación fluvial, con excepción del río Ulúa en el que se han hecho algunos trabajos de canalización, los demás ríos navegables lo son en la parte en que la naturaleza por sí misma lo ha consentido sin intervención alguna del hombre. Respecto a este asunto, en nuestra "Noticia Geográfica y Estadística de Honduras" se encuentran los datos que pueden ser apetecibles.

(E) CAMINOS PÚBLICOS.

Convencido el Gobierno de Honduras de que el único medio de fomentar y hasta de crear el tráfico es el de tener buenos caminos, ya en varias administraciones pasadas ha puesto todo su empeño en la construcción de carreteras. Existe en el país terminada, la magnífica carretera del Sur, que debe al jefe de la administración actual, doctor don Francisco Bertrand, su completa reconstrucción y el buen estado de conservación en que se halla, pues ruedan por ella constantemente, automóviles tanto para carga como para pasajeros, y carretas para la primera.

Otras carreteras existen en construcción en la actualidad. La de Comayagua, que es el comienzo del camino que conduce a la costa Norte o del Atlántico, y termina en Puerto Cortés. La de Olancho, que unirá la capital de la República con la del departamento, Juticalpa, atravesando la más grande porción del dicho departamento y del de Tegucigalpa, dos de los centros mineros más importantes de Honduras y además, Olancho, lugar de crianza de ganado, también el principal del país y apto para establecer en él grandes empresas agrícolas.

Hasta veinte y cinco caminos carreteros, todos ellos de construcción reciente, y, los más, en construcción todavía, existen en Honduras, los cuales se distribuyen, por departamentos, en esta forma: 3 en el departamento de Tegucigalpa; 2 en el de Cortés, 4 en el de Ocotepeque, 1 en el de Comayagua, 3 en el de Copán, 3 en el de Olancho, 2 en el de Intibucá, 6 en el de Choluteca; este departamento tiene muchas llanuras, lo que facilita la apertura de caminos en su jurisdicción; y 1 en el departamento del Paraíso.

En general, el tráfico en Honduras se hace en caballerías y por caminos de herradura. Estos caminos corren a cargo del Estado unos, que se denominan, como queda dicho, *caminos de herradura;* y otros al cuidado de las Municipalidades y se les llama *caminos rurales;* unos y otros se encuentran atendidos bastante, en proporción a los recursos de que se dispone para ello, que son procedentes del que se llama impuesto o *contribución de caminos*, que se paga en efectivo o con trabajo personal, si se trata de jornaleros, o de proletarios; del impuesto de *peaje*, del producto de las redenciones militares, del de arrendamiento de tierras nacionales, de las conmutaciones de penas de los delincuentes ya condenados; del fondo de desertores, del producto de las zonas minerales y del de las multas.

Como se ve, el Gobierno hondureño ha procurado dotar de fondos suficientes al ramo de caminos y carreteras, muy especialmente durante la administración última del doctor don Francisco Bertrand, lo mismo que durante las dos anteriores, de los generales don Terencio Sierra y don Manuel Bonilla,

convencido, como no podía menos de estarlo, de que el porvenir de Honduras depende de que su territorio esté cruzado ampliamente por vías fáciles y cómodas de comunicación, y de que éstas son las carreteras, hoy que el automovilismo ha tomado tan gran desarrollo, viniendo a suplir, con un costo infinitamente menor, a los ferrocarriles, que si son el desideratum en estos asuntos, no están al alcance de los pueblos nuevos, pequeños y pobres; mucho más que aun en el supuesto de que fuera posible su construcción actual, no podrían, en muchos años, dar producto suficiente para su conservación y entretenimiento, y dicho se está que no podrían ser inversión remuneradora para el capital consumido en ellos.

Entendiéndolo así, el Gobierno de Honduras se ha esmerado en abrir el país al comercio con el exterior por medio de la carretera del Sur mencionada, por la que se efectúa el tráfico de y con los departamentos de Choluteca, Valle, Tegucigalpa, El Paraíso, La Paz y Comayagua y gran parte de los departamentos de Intibucá, Gracias, Olancho y Yoro; y se empeña en la extensión y terminación de las demás carreteras ya enumeradas, para activar la vida industrial y la agrícola, minera y comercial del país y darles valor a sus riquezas naturales.

Creo mi deber mencionar el sistema que emplea el Gobierno de Honduras para proveer de fondos a la construcción de las carreteras y al mismo tiempo que realiza esta obra de progreso, efectúa otra no menos importante: la de amortizar paulatinamente la Denda Pública interior.

El presupuesto nacional señala, todos los años, una suma determinada para la amortización de la deuda interior; también señala otra para la construcción de carreteras. Dentro del monto de la primera, realiza la operación que vamos a consignar; pero hemos de expresar antes que en Honduras, como ocurre más o menos en todos los países, y muy especialmente en los pequeños y pobres, los créditos contra el Estado que constituyen una deuda flotante, sin interés alguno ni perspectiva de un pago más o menos cercano pero cierto, como ocurre en las demás naciones, con las llamadas deuda consolidada, amortizable, perpetua, etc., sufren una gran depreciación, que a veces excede de un 75% debido al poco crédito que merecen esos valores, y a que sólo se amortizan para la compra de tierras o por medio de otras operaciones muy lentas y limitadas, y nunca en efectivo.

Pues bien, el Gobierno de Honduras compra esos valores. Para ello, al contratar la construcción de una carretera o parte de ella, fija el valor o tipo a que recibe los repetidos valores ,a los que denomina "*constancias de crédito*" contra el Estado y señala también la suma que el contratista ha de venderle de ellas, recibiendo en pago la cantidad que corresponda al tipo fijado. La diferencia entre la cotización señalada y el valor, a la par, de las constancias de crédito que se le venden, la paga el Gobierno en efectivo, con cargo a la partida del Presupuesto denominada de Crédito Público, destinándola a la construcción de la carretera contratada, hasta el límite de la dicha partida, lo que viene a aumentar considerablemente la de carreteras. No diremos que este sistema sea perfecto y que, no coloque, hasta cierto punto, al Estado en la situación del que comercia con sus propias necesidades; pero sí que es muy práctico y ventajoso en la situación actual de Honduras, teniéndose que tomar además en cuenta que muchas de las constancias de crédito que se amortizan por ese procedimiento, proceden de indemnizaciones y pagos acordados como consecuencias de las muchas revoluciones y guerras que han azotado a aquel país en épocas aún recientes, créditos legítimos ciertamente, queremos y debemos creerlo; pero condenados a no ser cubiertos jamás ni en su totalidad ni en parte siquiera,

si no lo son por un precedimiento tal como el empleado por el Gobierno en la actualidad.

Para que pueda formarse una idea aproximada de lo que representa el esfuerzo que Honduras hace para sus vías de comunicación, carreteras, caminos de herradura y rurales, consignaremos las siguientes cifras, correspondientes al año económico de 1913 a 1914.

Las municipalidades de la República gastaron en la reparación y extensión de caminos rurales		$108, 471. 47
Cuya cantidad se descompone así:		
Caminos propiamente tales		91, 653. 05
Puentes de los mismos		16, 818. 42
Total		108, 471. 47
El Estado gastó en total en este ramo de comunicaciones, la suma de		496, 613. 62
De la que corresponde:		
A la carretera del Sur	$309, 436. 40	
A la carretera de Olancho	128, 591. 77	
A la carretera de Comayagua	33, 665. 00	
A la carretera de Copán	5, 676. 85	
A la carretera de Manto a Salamá en Olancho	664. 75	
Total gastado en carreteras		478, 034. 77
Caminos:		
De Cortés	875. 00	
De Intibucá	881. 00	
De Yoro	1, 351. 02	
De Ocotepeque	942. 50	
De Santa Cruz	6, 660. 00	
Total gastado en caminos por el Gobierno		10, 709. 52
El movimiento de fondos en el ramo de caminos, fué:		
Ingresos		607, 937. 12
Gastos		496, 613. 62
Saldo para 1914–1915		111, 323. 50
Como indicación de progreso, haremos la comparación del año de 1913–14 con el anterior de 1912–13:		
Ingresos en 1913–14		607, 937. 12
Ingresos en 1912–13		344, 628. 81
Saldo en favor de 1913–1914		263, 308. 31

II. Comercio.

Al tratar de esta parte de la Sección IX del Programa Preliminar, hemos de referirnos a nuestro trabajo, también sometido el Segundo Congreso Científico Panamericano, titulado: "Noticia geográfica y estadística de la República de Honduras, Centro América."

Nos limitaremos a tratar aquí algunos puntos que no lo hayan sido en el trabajo nuestro citado, empezando por la enumeración rápida de algunos de los productos explotables que existen en Honduras en todos los ramos.

Minas y minerales.—Es reconocida por todo el mundo, la riqueza mineral de Honduras, inexplotada en su mayor parte, y de la que da muestra patente, entre otras, y en primera línea, la producción obtenida por la *New York and Honduras Rosario Mining Company*, que en el año de 1913–1914 benefició 104,180 toneladas de broza mineral, obteniendo un producto de 1,802,318 onzas de plata y 13.699 onzas de oro, con un valor total de $2,786,599.42 plata, o dólares $1.177.896.89, al cambio de 236.05% que fué el promedio del año.

Denunciadas, aunque no todas, ni en muy pequeña escala, trabajadas, existen 616 minas, respecto de las cuales debemos decir que su descubrimiento, en su totalidad, se ha debido a la casualidad o a la práctica rutinaria de *güirises y cateadores;* pero casi nunca o nunca a trabajos de los hombres de ciencia, que para Honduras parecen no haber existido hasta ahora, pues, cosa en verdad curiosa: hasta las compañías organizadas en el exterior, a juzgar por los resultados que han obtenido los *expertos* y los ingenieros de minas que han enviado a Honduras, no han demostrado tener muchos conocimientos científicos y menos práctica de ellos, en tanto que el mineral mencionado, el *Rosario*, sito en San Juancito, en jurisdicción de Tegucigalpa; los no menos célebres de El *Socorro y Las Ánimas*, en el Valle de Ángeles; el del Tránsito, en jurisdicción de Valle, y casi todos o todos los descubiertos, con rarísimas excepciones que confirman el hecho general, han sido descubiertos y empezados a explotar por los *güirises*.

En Honduras dominan, en la vertiente del Pacífico y en los departamentos centrales, las minas de plata, no faltando también las de oro y otros metales, entre ellas algunas importantes de hierro imanado, como la de *Agalteca*, en el departamento de Tegucigalpa; de oro, las del *Corpus*, en Choluteca, y de *El Tránsito*, ya mencionada, en Valle, en tanto que en las tierras bajas y en las vertientes del Atlántico existen en mayor número, minas de oro, placeres de este mismo metal y arenas auríferas en muchos de los ríos. En esta parte del país comienzan a trabajarse depósitos de carbón mineral y se han encontrado también depósitos de nafta y otros hidrocarburos, los que dejan esperar, para un porvenir próximo, la creación de diversas industrias en Honduras y la explotación en grande escala de esos depósitos minerales. Por desgracia, hasta ahora, las concesiones para la busca de petróleo y para su explotación están acaparadas por unas muy pocas personas del país, imbuidas por prejuicios contra las empresas extranjeras unas, y otras con el de que son riquezas que se dilapidan los problemáticos depósitos, que ellos no explotan ni dejan explotar, si los extranjeros establecen en ellos los correspondientes trabajos para su explotación, creencia tan errónea como ridícula, de la que no participa ciertamente sino una minoría de las habitantes del país, y que sólo la ignorancia puede mantener y aun fomentar, escudada por un patriotismo falso.

Enumeraremos los minerales principales, que se encuentran en cada uno de los departamentos de la República, tomando como base las minas denunciadas.

En Tegucigalpa, oro, plata, plomo, cobre y hierro. Existen además otros minerales de uso industrial, como marga, azufre, yeso, kaolín, cuarzo hialino y litoídeo, piedra caliza, etc.

En Comayagua, las principales minas son de oro; las hay también de plata, cobre, hierro, estaño y plomo.

En El Paraíso, de oro, plata y cobre.

En Valle, de oro y de plata.

En La Paz, de oro, plata y plomo.

En Gracias, de oro y de plata. En este departamento se encuentran muy ricos yacimientos de ópalos y otras piedras preciosas: turquesas, berilos, topacios, granates, etc. También existe allí salitre y se encuentra mármol de muy buena calidad y hermosura.

En Copán, de oro, plata, cobre y aluminio; también hay canteras de mármol y yacimientos de ópalos.

En Santa Bárbara se encuetra mármol que, por su grano fino y su blancura, compite con el estatuario de Italia; oro, plata, cobre, hierro y aluminio.

En Olancho, los ríos, especialmente el Guayape, llevan oro en sus arenas. Hay además minas de oro, plata y cobre; siendo famosas las de oro de *Concordia;* y las llamadas del Rucio.

En Cortés, oro, abundando los lavaderos de este metal. En la montaña de Sula hay buen mármol y en abundancia. Con caminos fáciles, sería una riqueza para el país y para la compañía explotadora, pues el mármol se encuentra muy cerca de la costa, donde dominan los llanos.

En Yoro hay minas de oro, de plata, cobre, hierro, antimonio y depósitos de sales minerales industriales, carbón mineral y nafta.

En Colón, oro, especialmente en la región de La Mosquitia; plata, plomo, zinc, níquel y hierro; y

En Choluteca, oro, plata y cobre y depósitos de asfalto. Además de los minerales enumerados existen otros en Honduras, de los que ejemplares valiosos han sido exhibidos en la recientemente terminada Exposición Internacional de Panamá y el Pacífico, tales como platino, en Gracias y Choluteca, el cinabrio que se encuentra en Ocotepeque y en otras jurisdicciones.

Entre los productos vegetales de Honduras útiles para la industria y para el comercio internacional debemos señalar como el principal, las maderas para construcción y para ebanistería, de las que en la citada Exposición se presentaron 186 variedades con 526 ejemplares.

Muy pocas son las que hasta ahora han sido materia de exportación; de ellas, la principal, la caoba (*swectinia mahogani*), de la que se encuentran árboles de 5 a 6 pies "en cuadro," de base, por 17 de altura o sean 550 pies cúbicos de madera.

El cedro también se exporta en alguna cantidad.—Existe en algunas variedades; pero la más buscada es el cedro oloroso (*cedrola odorata*).

Se exportan además, la madera de rosa (*amiris balsamifera*); el guanacaste *o lignumvitæ* (*ramnus sarcomphalus*) y algunas otras pocas más.

Para no hacer muy cansada esta enumeración, citaremos algunas maderas más de las más comunes, de las existentes en Honduras.

La *ceiba* o árbol de algodón (*bombax ceiba*), la encina (bigonia), zapotillo (*achras sapota*), mangle (*rizohora mangle*), mangle grape (*coccolaba ubifera*), quiebra-hacha (*syderoxilum*), jícaro (*crescentia*) y algarroba (*himenæa courboril*).

El limoncillo, arrayán, laurel, mano de león, ébano blanco y negro; membrillo silvestre, nogal, madre de cacao, guachipilín, ronrón, hoja péndula, guayacán (es el verdadero *lignumvitæ*), también *ligumvitæ;* pimientillo, melón, amarillo, mora, peine, nance, liquidambar, nacascotle, guapinol.

En Honduras son abundantísimos los pinos (*ocote*), blancos y resinosos.

Maderas tintóreas existen el palo campeche, el fustoc o amarillo (*morus tinctoria*), el sándalo amarillo (*santalum*), el Brasil (*casalpina echinata*), sangre de drago (*pecterocarpus draco*) y el achiote (*bixa orellana*).

Gomas y plantas medicinales abundan en Honduras. De los árboles que producen las primeras citaremos el arbusto de la goma arábiga (*acacia arabiga*), abundantísima en las sabanas de Olancho y en las del lado del Pacífico. El copaiba (*copaifera officinalis*), liquidambar (*styrax officinalis*), copal (*hed-*

wigia balsaminifera); el caucho, en Honduras *hule* (*siphonia elastica*); el bálsamo negro o del Perú, el jiñicuite, copal de Ceylán (*hygmenœa vermicosa*) llamado en Honduras guapinol y el copalillo (*hygmenœa courbaril*), etc.

De entre la multitud de plantas medicinales existentes en Honduras no mencionaremos sino la zarzaparrilla (*smilax siphilitica*), famosa en el tiempo en que era muy empleada; el ricino o palmacristi (*ricinus communis*), el truc o *cuasia amara*, gengibre, sasafrás, etc.

La vainilla, de excelente calidad, es muy abundante (*epidendum vanilla*); pero no se ha aprendido a prepararla bien, por lo que no es todavia un artículo comercial de la importancia que debiera ser.

Materias textiles hay en Honduras muchas y abundantes, comenzando por el agave o pita, el henequén, el mezcal; el algodón que se produce muy bien y en localidades muy variadas, lo mismo el arbóreo que el herbáceo, y pudiera ser un artículo de muy importante comercio y base para una gran industria dentro del país.

Frutas son muchas y muy variadas las que se dan en Honduras, que constituyen ya un ramo importantísimo de su comercio con los Estados Unidos. De ellas, la principal es el banano, que se cultiva en una vasta zona de la costa Norte, siendo este negocio la causa y el estímulo para que en ella, y en todas direcciones, se construyan ferrocarriles y se habiliten puertos, con muelles cómodos para facilitar la carga de los buques. Se exportan también cocos, limas, naranjas y limones, y pudieran ser cultivadas muchas otras frutas.

La naturaleza, da silvestre, el *cacao mico*, cuya nuez es más larga que la del cultivado. Este cacao silvestre abunda en los aluviones del Norte de la República y es bastante estimado. El árbol de la pimienta (*myrtus pimienta*) abunda también, siendo de muy buen aroma e igual a la que se exporta de Jamaica, artículo con el cual no se comercia en Honduras, como debería hacerse.

La caña de azúcar es indígena en Centro América y por tanto en Honduras. Difiere de la asiática, que se cultiva por lo general, en que es más larga y blanda y da proporcionalmente más jugo. Se cultiva y crece bien lo mismo en las tierras bajas que en las alturas y se puede cortar dos veces al año. Su cultivo es hoy muy reducido, en términos que no se produce en Honduras, como podía producirse, todo el azúcar que se consume, la que se importa principalmente de Nicaragua y también de El Salvador y de Guatemala. El principal consumo de la caña de azúcar es para fabricar aguardiente, el que pudiera obtenerse de muy buena calidad, como lo han demostrado varios fabricantes en la reciente Exposición de San Francisco, entre ellos, don Angel R. Alcántara, de Danli, cuyos aguardientes fueron premiados con medalla de oro. En el interior de Honduras, donde el aguardiente está estancado y constituye la segunda de las rentas fiscales su producto, el aguardiente que se vende es de muy inferior calidad, por desgracia.

El tabaco hondureño es de muy buena calidad y de exquisito aroma. Durante mucho tiempo, desde la época de la Colonia, se ha exportado en fuertes cantidades, a veces para reemplazar al de Cuba, con el que puede competir bien; es éste otro artículo hondureño de comercio, cuya producción puede ser muy aumentada, ya para la exportación de la hoja sin preparar o para la de sus productos ya elaborados.

Lo mismo ocurre con el café, de calidad excelente, pues el de Güinope por ejemplo, obtiene en el exterior precios de fantasía. En los últimos años ha tomado este cultivo algún incremento y puede en lo sucesivo dar grandes rendimientos. La falta de caminos fáciles y económicos, es a no dudarlo uno de los factores que más contribuyen a que la producción del café, del tabaco y otros artículos, no se desarrollen como pudieran. También contribuye

a ellos la falta de capitales en el país para grandes empresas agrícolas y no poco la escasez de brazos.

Pudiéramos extendernos mucho más sobre la producción de Honduras y sus artículos de exportación; pero el hacerlo sería alargar excesivamente este trabajo.

(*b*) DESARROLLO DE INDUSTRIAS DOMÉSTICAS.

En estos últimos años algo se ha hecho en Honduras en favor de la producción industrial interior, que se ha desarrollado bastante relativamente; pero la escasez de materias primas, el gran costo de su transporte así como el de los productos ya fabricados, son rémoras que se oponen al desarrollo de numerosas industrias, que tendrán en lo porvenir en Honduras una situación halagüeña. Esto no obstante, se han establecido fábricas de cigarros y cigarrillos, de calzado, de velas esteáricas, de jabones y perfumes, de cervezas, vinos de frutas, confites, aguas gaseosas, ladrillos de cemento y de imitación de mosaico, aguardientes, tenerías, etc. Productos tales como los cigarros y cigarrillos, pueden competir bien con los de otros países y los sombreros de junco o de Santa Bárbara, compiten con los llamados de Panamá en su finura y hermoso aspecto, siendo infinitamente más baratos que aquéllos.

El Gobierno dispensa la posible protección a toda industria nueva que se establece en el país y para el desarrollo de las ya establecidas. Esta protección se traduce en franquicias para la importación libre de maquinaria, útiles herramientas y materias primas, franquicias que se conceden por una sola vez o por un período de tiempo determinado según la importancia de la industria o empresa de que se trate. Exención de toda clase de impuestos por un tiempo señalado, exención también de derechos de exportación de los productos manufacturados y por último, la aplicación de tarifas de importación con derechos protectores para la producción nacional.

No siempre el sistema de franquicias y de exenciones da el resultado apetecido; pero no es la culpa del sistema, sino en muchos casos de las personas y entidades a cuyo favor se aplican, pues que no tratan de beneficiar sus industrias, sino de defraudar al Estado, introduciendo libremente en el país artículos con los cuales comercian, perjudicando no sólo al Fisco, sino también al comercio de buena fe y a las demás industrias similares. Disposiciones recientes y reglamentarias, expedidas por el Gobierno y una constante vigilancia han puesto coto a esos manejos; pero todavía queda mucho por hacer en este particular. Los abusos apuntados han sido parte muy principal para que se vean con disgusto, por muchas gentes, las concesiones y para que en el mismo Congreso Nacional y en muchos otros centros oficiales, sea fuerte la oposición que se les hace en la actualidad.

(C) COMERCIO ENTRE PAÍSES AMERICANOS.

Nulo o casi nulo es el que se hace en Honduras con los demás países americanos, excepción hecha del que se realiza con los Estados Unidos, que ha aumentado paulatina, pero constantemente de año en año y en los dos últimos, por consecuencia de la guerra europea, por manera muy considerable; y con los demás países centroamericanos, Guatemala, El Salvador y Nicaragua principalmente. Las causas de esta falta de relaciones comerciales internacionales americanas están patentes. En su mayor número, los países americanos tienen una misma producción natural y la fabril, si tal vez pudiera competir con la europea por lo que hace a calidad, nunca en cuanto a precio ni a facilidades para los pagos. Los métodos para las ventas entran por mucho en su cuantía. Y esto último es factor muy importante, tanto que si

el comercio de este gran país americano no modifica sus métodos y adopta los europeos en este particular importantísimo, el aumento colosal actual de su comercio se verá retroceder nuevamente a mucho menores proporciones, tan luego como cesada la guerra, vuelvan las fábricas y los mercados de Europa a abrir sus puertas y a reclamar de su antigua clientela el mismo favor anterior, a cambio también de las mismas facilidades antiguas y tal vez de otras mayores, que la necesidad de volver a atraerla haga sugerir.

El comercio europeo, antes el inglés en primera línea, y recientemente el alemán, con el francés, el italiano y ya también con el español, concede plazos de tres a seis meses fecha de factura y también de embarque de las mercancías, para el reembolso de su valor, no sólo a los grandes comerciantes centroamericanos, sino también y muy principalmente a los de pequeña escala, aun sin capital efectivo pero sí con el de la honradez y la laboriosidad, a los que conoce perfectamente y con quienes mantiene también además relaciones personales de amistad estrecha, en la casi generalidad de los casos.

Dos son los métodos de que se valen los comerciantes europeos para formar su clientela y para llegar a un verdadero conocimiento de ella y de su valor comercial. El uno, que es el de las casas alemanas, es el establecimiento de sucursales en los países respectivos, las que tienen muestrarios variados en muchas de ellas. Son las intermediarias entre la casa principal y el cliente, al que conocen bien y al mismo tiempo, casi siempre son sus agentes para la venta de sus productos en el exterior y para la distribución de sus fondos. Residiendo en el mismo país y a veces en la misma población de la clientela, claro es que la conocen bien, moral y materialmente y también su capacidad económica y su situación efectiva.

El otro método, empleado mucho por franceses, ingleses y españoles, es por medio de agentes viajeros, que visitan a la clientela anualmente, reciben sus órdenes, para las cuales a veces tienen que trabajar mucho; liquidan las cuentas y entablan relaciones nuevas, por lo general provechosas.

Ha pasado ya el tiempo en que era verdad axiomática, "que el buen paño en el arca se vende." Hoy precisa sacarlo a la luz, anunciarlo y hacerle "*reclamo*." Por otra parte, el halago de que el pago de la mercadería, aun recargada con un tanto por ciento pequeño, será pagada casi o por completo de sus propios productos, es un atractivo para el comprador con fondos disponibles, pero acostumbrado al uso del crédito y mucho más para el comerciante honrado, pero que no dispone de capital o si acaso del indispensable para fletes y pago de derechos aduaneros e impuestos, que sin plazos para los pagos de la mercancía, no podría entrar en negocio alguno.

La intervención en el comercio de entidades bancarias más que de comisionistas, para el descuento de los documentos comerciales, como un auxiliar entre el productor y el comprador, es altamente provechosa, en tanto que la del comisionista pesa sobre el comercio con los grandes recargos que le impone y estorba más que facilita el curso de las operaciones. La intervención del banco, en cambio, las hace posibles. A su establecimiento en los países de Ibero-América deben tender todos los esfuerzos, pues con el se harán posibles las relaciones comerciales y su desarrollo constante. El anticipo de fondos para las compras o el pago al contado de ellas, muy pocos pueden hacerlo en Centro América y particularmente en Honduras. A ello se opone además la costumbre de muchos años y las solicitudes del comercio europeo a plazo. El mismo comercio de los Estados Unidos ha ido aumentando hasta sus últimas cifras, antes de la guerra, a medida que ha ido poniendo en práctica métodos semejantes a los europeos.

(D) LA MEDIDA DEL COMERCIO EXTRANJERO.

La balanza comercial de Honduras está en favor de la importación, lo que hace que el país no pueda desembarazar su situación económica.

La exportación total en el año pasado de 1913–1914 ascendió a $8,553,327.35, plata, señalándose un aumento de $600,906.62, plata, suma que es muy de tomar en cuenta, con relación al año anterior que sumó únicamente $7,952,420.73.

Señalaremos tan sólo los artículos de exportación que alcanzaron mayores cifras. Fueron exportados:

Bananos, 6.610.164 racimos, con valor de	$4,280,046. 76
Plátanos, 361,535 racimos, con valor de	5,946. 50
Cueros de res, 805,861 libras, con valor de	399, 564. 45
Café, 1,214,454 libras, con valor de	290, 755. 04
Cocos, 10,366,955 piezas, con valor de	549, 919. 08
Ganado vacuno, 21,911 cabezas, con valor de	628, 402. 50
Caucho, 33,537 libras, con valor de	35, 722. 88
Oro y plata en bruto, 138 libras, con valor de	22, 880. 37
Oro y plata en cianuro, 156,686 libras, con valor de	2, 155, 267. 60
Oro en bruto, 136¼ libras, con valor de	19, 788. 00

La exportación, por países de destino fué como sigue:

A Estados Unidos, por valor de	7, 435, 189. 70
A Guatemala	452, 302. 50
A Alemania	411, 517. 03
A Belice (colonia de)	88, 637. 62
A El Salvador	71, 396. 00
A Inglaterra	41, 992. 10
A Nicaragua	26, 530. 00
A Francia	12, 382. 40
A Perú	5, 790. 00
A Méjico	4, 160. 00
A Panamá	2, 430. 00
A Costa Rica	700. 00
A Italia	300. 00
Total, plata	8, 553, 327. 35

La importación sumó, en oro, un valor de $6,624,929.79, que al cambio medio anual ya expresado, de 236%, dan en plata, $15,638,146.76. La diferencia en contra de la exportación fué, en moneda de plata, $7,084,819.41.

Tendría gran importancia y utilidad al mismo tiempo, la reunión en Estados Unidos de un Congreso Comercial Panamericano, en una fecha lo más inmediata posible, con el fin de que personas entendidas de todo el continente occidental discutieran y se pusieran de acuerdo acerca de conclusiones relativas a la uniformidad de los métodos y reglas para recoger los movimientos del tráfico y a la clasificación de las mercancías, así como para que formularan modelos de facturas consulares, manifiestos, guías y demás documentos relacionados con el comercio internacional americano, que pudieran ser aceptados por todas las naviones de este hemisferio, y, a su vez, pudieran serlo también después por las demás naciones del mundo. Creemos que éste sería el medio más factible para llegar a la uniformidad tan deseada como necesaria.

III. Renta e Impuesto.

(A) IMPUESTO.

Las rentas principales de Honduras, cuyo producto se destina a sufragar los gastos del servicio público, son las siguientes:

Renta de aduanas.

Renta de aguardiente y renta de licores.

Impuesto de caminos.

Impuesto de papel sellado y Timbre, con otras más secundarias.

Impuestos personales no hay sino el de caminos, ya mencionado y otro de escuelas que cobran las municipalidades, las que también cobran otros pequeños impuestos, para cubrir sus gastos, como son: uno sobre los establecimientos de comercio, otro sobre el consumo pecuario, sobre la entrada en la localidad de cada bulto de mercancías extranjeras, etc.

El comercio y la industria no pagan contribuciones por su ejercicio; y por más que sería justo, en cambio de las facilidades y franquicias que el Estado concede, que cobrara algún modesto impuesto sobre los ingresos o productos de las empresas que han recibido concesiones y exenciones, hasta muy recientemente ninguna empresa o compañía privilegiada ha tenido que hacer frente a tales pagos. En la actualidad el impuesto de muelle que cobran algunas compañías concesionarias, tienen que partirlo con el Gobierno, en la proporción señalada en los acuerdos y decretos de concesión.

La transmisión de la propiedad inmueble, los beneficios o productos comerciales, industriales o de cualquier otro género y la herencia, no tienen en Honduras impuesto de ninguna clase, fuera de los derechos de papel sellado y timbre, y los de inscripción en los registros de la propiedad. En cuanto a los extranjeros, tienen las mismas obligaciones y cargas que los nacionales, gozando desde puntos de vista económicos, comerciales e industriales, de los mismos derechos también que los hondureños.

Para países de tan pequeña exportación como Honduras, la reciprocidad en concesiones arancelarias, en manera alguna puede ser conveniente. Pruebas de ello son los tratados firmados en Wáshington, entre las Repúblicas de Centro América, el 20 de diciembre de 1907. Honduras los aprobó y consideró en vigor inmediatamente, aun sin la formalidad del canje y sin esperar la aprobación de los demás Estados centroamericanos. El Salvador, por el contrario, no los ha aprobado hasta ahora, habiendo celebrado, este mismo año, con Honduras, un nuevo tratado comercial, sobre bases que, hasta ahora, parecen aceptables. La razón de la inconveniencia de esas concesiones radica en la similitud de su producción y exportación que hace que las concesiones de los tratados recaigan en perjuicio de la producción nacional, en lucha de competencia con la importación de los mismos productos.

Un hecho reciente debemos citar en comprobación de la opinión expuesta: Honduras firmó, *ad referendum*, un tratado con la Gran Bretaña, en 1909, en el que, entre otras concesiones mutuas, se consignaron ciertas ventajas y exenciones de pago para la marina mercante de los dos países contratantes. El tratado no se aprobó en su forma primitiva, pues se cayó en la cuenta de que era lo mismo que suprimir los impuestos de puerto, faro, muellaje, etc., conceder exenciones de ellos a la marina inglesa, la primera nación marítima del mundo. ¿Cuáles ventajas reportaba de esto Honduras? Ninguna en realidad, ya que la marina mercante hondureña no existe aún, para que pudiera gozar de las ventajas de la reciprocidad en los puertos ingleses.

(B) INVERSIONES DE CAPITAL EXTRANJERO.

De dos clases o mejor bajo dos aspectos deben considerarse éstas. El uno las inversiones que se hacen y hagan en el interior del país para el establecimiento y desarrollo de empresas industriales y comerciales en el mismo; habilitaciones y anticipos sobre productos, frutos o cosechas, reintegrables con estos mismos o con su valor, con o sin interés, si se fija desde luego un precio dado a la especie o producto a recibir; y el otro, el que se refiere a los créditos abiertos al comercio en la venta y remisión de mercaderías extranjeras. De estos últimos hemos hablado ya en el párrafo II, *Comercio*, letra *d*, con la extensión debida, por lo que sólo insistiremos en la necesidad para el comercio americano, de estudiar detenidamente este asunto de los créditos comerciales, si quiere que las corrientes que hoy se dirigen a los Estados Unidos, por la situación de Europa, sean permanentes y que terminado el actual conflicto, no retrocedan a sus antiguos cauces.

Repetimos: el anticipo de fondos y las compras al contado no son sino para muy contados comerciantes de Centro América. La multiplicación de los intermediarios banqueros, con capital positivo y la creación de establecimientos de crédito comercial, consagrados a anticipar a productores y fabricantes los fondos que más tarde repondrán los compradores a plazo, mediante el descuento de documentos comerciales expedidos por ellos, pueden hacer, a nuestro juicio, proveedores definitivos a los Estados Unidos, del comercio del continente americano o por lo menos de la mayor parte de él.

(C) UN PATRÓN MONETARIO COMÚN.

El patrón monetario común, si se refiere a tener todos una misma moneda que circule por todos los países concertados al efecto, o monedas diversas pero de un mismo tipo y exacto valor intrínseco, es una utopia que persiguen economistas y diplomáticos del mundo entero desde hace tres cuartos de siglo. Pero si se trata de darle valor estable a la moneda en todas las naciones convenidas, adoptando como patrón el oro, por sus pocas fluctuaciones en los mercados del mundo, entonces vale la pena de empeñarse en conseguirlo.

Muy de desear sería poder llegar en Honduras al patrón de oro, desideratum consignado en las ya mencionadas convenciones de Wáshington de 1907. Se oponen a ello, entre otras razones, la primera la falta actual de oro y la existencia de plata en el país, tan deprimida en su valor, que ya no tiene poder liberador alguno con el que se pueda contar por manera estable. Por otra parte, el enorme déficit que presenta la balanza comercial, en Honduras, respecto de las exportaciones. Sin embargo, resolución y buena voluntad serían bastantes para plantear el problema de la adopción del patrón de oro único; mas para su resolución sería preciso el auxilio exterior por medio de un empréstito; pero empréstito verdadero, que llevara al país el oro que necesita para ese cambio tan radical en su vida económica y no una combinación de números en el papel, como lo fué el proyecto de empréstito de 1910, que habría sido la esclavitud política y económica de Honduras, y un desastre financiero del que el país tiene ya triste ejemplo y recuerdo, con la carga echada sobre su nombre, con los manejos bursátiles y de otra especie, conocidos por "*Los Empréstitos de Honduras de Londres y París, de 1867, 1869 y 1870*.

Paso primero, pero eficaz, para la consecución de oro, en la medida siquiera de lo que necesita el Gobierno para pago de sus créditos pasivos en oro, en el exterior, ha sido el cobro, en oro, de un cinco por ciento adicional sobre el monto de la importación total, y es de esperar que nuevas y bien meditadas

medidas fiscales, continúen, lenta pero segura y constantemente, llevando oro a las arcas nacionales, para que, sin grave quebranto para los intereses generales ni particulares, pueda llegarse en el menor plazo posible, al patrón de oro, orientación que debe ser la del porvenir para todos los países americanos y para Honduras muy especialmente, ya que parece haberse salvado del grave escollo del papel moneda y que su exportación, aumentada en el año último en más de medio millón de pesos con respecto a la del año anterior, ofrece perspectivas de posteriores y continuados aumentos, que tan necesarios son para alcanzar el nivel económico en la balanza comercial.

NOTICIA GEOGRÁFICA Y ESTADÍSTICA DE LA REPÚBLICA DE HONDURAS, CENTRO AMÉRICA.

Por ANTONIO A. RAMÍREZ F. FONTECHA,
Ex-Rector de la Universidad Central de la República de Honduras.

INTRODUCCIÓN.

Tiene por objeto esta "Noticia" difundir y popularizar el conocimiento de la República de Honduras y de sus condiciones y peculiaridades, desvaneciendo al mismo tiempo la leyenda que la ignorancia y la pasión han extendido sobre ella, presentándola como región en estado enteramente primitive, en la que sería imposible al capital y a la actividad humana obtener remuneración alguna de sus inversiones y esfuerzos.

Estos apuntes están destinados a demostrar, por el contrario, así a los hombres de capital y de industria, como a aquellos que no tienen más bienes que los de su honradez y capacidad para el trabajo, que allí tienen el hombre de empresa como el simplemente laborioso, los medios más favorables y el ambiente más propicio para desarrollar sus energías y actividades, y también para el empleo remunerador de sus capitales.

Honduras necesita de población: le es urgente colonizar sus vastos territorios, explotar sus minas, hacer productivos sus campos, establecer y desarrollar industrias y dar vida a su comercio.

Es uno de los países de América que ofrece más ventajas y perspectivas al inmigrante extranjero, quien, desde el primer día que pisa el suelo nacional, es un miembro más de la familia hondureña.

A sus tierras vastas y feraces, aptas para la ganadería y para la agricultura y en las que se dan la mayor parte de los productos de todos los países, de tráfico comercial, une un clima benigno y sano que reduce su mortalidad a un tipo de los más bajos del mundo.

La baratura de las tierras y las facilidades que la ley da para su adquisición; la existencia de valiosos yacimientos minerales y la liberalidad que caracteriza a sus leyes sobre minería; los usos y costumbres democráticos, la sencillez y el carácter proverbialmente afable y hospitalario de sus hijos; son todos factores que concurren a que el extranjero no se considere extraño a la población nacional desde el mismo instante de su ingreso en el país.

Fijen, pues, su atención en los datos que abarca esta "Noticia" aquellos que buscan terreno apropiado para dar actividad a sus capitales o a su laboriosidad, y verán corroboradas las afirmaciones contenidas en este preámbulo.

Bien quisiéramos haber dispuesto de datos más extensos; pero los compilados, con todas sus deficiencias, son suficientes para dar una idea general y bastante exacta del país, de sus recursos y de su situación actual. Debemos sí agregar que están aquéllos recogidos con toda escrupulosidad, de tal manera que reflejan

la verdad bajo todos sus aspectos, con todas las restricciones únicamente debidas a estar en los comienzos de su desarrollo servicios tan importantes como los de estadística, especialmente en su concepto fiscal y comercial. En este orden, es tal vez este trabajo el primero medianamente satisfactorio que se publica sobre Honduras, sin otras pretensions que el fin ya expuesto: dar a conocer el país lo más exacta y ampliamente posible, aprovechando la ocasión para hacerlo al deferir gustosamente a la amable invitación que se nos ha hecho para concurrir con algún trabajo, al Segundo Congreso Científico Pan-Americano.

TERRITORIO.

Situación.—" Centro América, respecto a su posición geográfica, casi realiza," dice Spuier, " la antigua idea del centro del mundo." La República de Honduras, célebdre por el descubrimiento de su territorio hecho por el mismo Colon; hermosa por su cielo y por su clima, rica en producciones variadas, renombrada por la riqueza de sus minas, ocupa el centro precisamente de Centro América y aun cuando límites naturales indican la demarcación de su territorio con respecto a los de sus vecinos, sus afinidades naturales, históricas, de raza, religion, lengua, y, sobre todo, los vínculos creados por tres siglos de unidad y la que existió también en los primeros años de la vida independiente de Centro América, no han podido ser borrados por la influencia de una política separatista y como tal diferente ni por la obstinación de permanecer divididas, manteniendo su autonomía particular.

Cosmografía.—La República de Honduras está comprendida entre los 12° 58′ de latitud septentrional, paralelo en el cual se encuentra el *talweg* del río Negro después de haberse unido con el río Guasaule, y los 16° 2′ de latitud Norte punto extremo de la llamada Punta Castilla, en el mar Caribe, que cierra la bahía de Trujillo; y entre los 83° 10′ de longitud Oeste de Greenwich, punta oriental del Cabo Gracias a Dios, en el Oceáno Atlántico, y los 89° 17′ de la misma longitud, que corresponden al vértice del ángulo que forman los límites de Honduras con Guatemala y El Salvador, en el lugar denominado cerro del Brujo. De aquí resulta una extensión en longitud del territorio hondureño de 6° 7′ equivalente a 25 minutos y 6 segundos próximamente, lo que constituye el adelanto que la hora tiene en los puntos orientales sobre la de los puntos occidentales, y una amplitud en latitud de 3° 4′ que equivalen como aproximamente 20 minutos de diferencia entre la duración de los días más largos y de las noches más largas.[2]

Limites.—Honduras tiene por límites tres fronteras de otras tantas repúblicas centroamericanas y dos líneas de costas bañadas por mares diferentes.

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[1] Cuarto viaje. 14 de agosto de 1502.

[2] Difícil nos ha sido fijar la longitud y latitud del territorio hondureño por la diversidad de cifras que hemos encontrado señaladas respecto del particular. En su libro titulado " Honduras," Mr. E. G. Squier fija las siguientes cifras: Latitud Norte de los 13° 10′ a los 16°; longitud Oeste de los 83° 20′ a los 89° 30′. El licenciado don Antonio R. Vallejo, en su " Primer Anuario Estadístico" correspondiente a 1889 consigna los siguientes números: " Entre los 83° y 89° 3′ longitud Oeste del meridiano de Greenwich y los 13° y 16° 10′ latitud N. La " Breve Reseña Para la Exposición de San Luis" fija la siguiente situación: " Entre los 13° y los 16° 30′ latitud Norte, y los 83° y 89° 30′ longitud Oeste del meridiano de Greenwich." Los datos que hemos tenido como más exactos están tomados de la carta marítima oficial de los Estados Unidos publicada por *The Hydrographic Office, Navy Department, Washington, D. C.*, septiembre de 1884, corregida en 1907; de la Carta Marítima de las Indias Occidentales publicada en Londres, en junio de 1843, y corregida sucesivamente hasta 1910, por *The Hydrographic Office of the Admiralty* y del mapa de la línea de límites entre Honduras y Nicaragua levantado por la Comisión hondureña, en 1901 y que sirvió de base al Laudo de Su Majestad, el Rey de España de 23 de diciembre de 1906. Tenemos, pues, fundamento oficial e imparcial para aceptar como buenos los números que incluimos en el texto.

Al Norte, desde el punto en discusión en que comienza el estado de Guatemala, que por estar en tal situación no queremos mencionarlo, limita el territorio hondureño el mar Caribe, en el Océano Atlántico, hasta el cabo Gracias a Dios, en una extensión de litoral de 765 kilómetros próximamente.[1]

Al Oeste y Noroeste está limitada por Guatemala desde el punto antes mencionado, hasta el vértice del ángulo formado por esta línea y la que corresponde a los límites de Honduras con El Salvador, en el lugar denominado *Cerro del Brujo*, en una extensión de frontera de 223 kilómetros.

También forma límites con Honduras, la frontera de El Salvador al Suroeste y Oeste, desde el lugar señalado del cerro Brujo, hasta la desembocadura del río Goascorán, en una extensión total, aproximadamente, de 329 kilómetros.

Del lado Sur, la bahía de Fonseca, en el Oceáno Pacífico, la limita en una extensión de 143 kilómetros, hasta el punto conocido con el nombre de Amatillo, en la parte inferior del rio Negro, desde este punto hasta la confluencia del río Guasaule con el Negro sigue la línea de límites en una extensión de frontera con Nicaragua de 37 kilómetros.

A partir del punto de confluencia citado, el territorio hondureño está limitado, al Este y Sureste, por Nicaragua, hasta la desembocadura del río Coco, Segovia o Wanks, en el Océano Atlántico, en una extensión de frontera de 717 kilómetros próximamente.

El perímetro de Honduras es de 2,214 kilómetros aproximadamente, en esta forma:

	Kilómetros.
Líneas de litoral	908
Fronteras con otros Estados de Centro América	1,306
Total	2,214

Aspecto.—El territorio de Honduras es muy accidentado, lo forman altas filas de montañas, elevadas planicies, valles profundos en los que se encuentran llanos extensos y fértiles cruzados por ríos más o menos caudalosos y algunos navegables, todo lo cual contribuye a que Honduras, en su suelo y en su clima, sea como un resumen de toda la vida vegetal y animal de todos los países del globo, de todos los climas, y por consecuencia de todas las producciones, desde aquellas de la zona tórrida a las de las zonas templadas.

Superficie.—Como queda indicado, el suelo de la República presenta en su superficie grandes accidentes. De la base común de la cordillera que forma como el espinazo de toda la América y que del Sur se extiende al Norte, pasando por el Centro, parten en varias direcciones líneas de montañas que atraviesan en direcciones diferentes todo el territorio.[2] La gran cadena de estas montañas, vista desde el Pacífico, del que no dista más de 90 ó 100 kilómetros, tiene la apariencia de una muralla natural, con una línea más baja de montañas, alternada con picos de volcanes de extraordinaria regularidad. En el extremo Sur éstos desaparecen para manifestarse en la bahía de Fonseca bajo la forma de islas de origen volcánico con picos altos y montañas.

Por el Norte se encuentran varios grupos de montañas que cortan la costa longitudinalmente, no dejando percibir desde el mar interrupción alguna que indique el curso de los ríos por entre le continuada cadena de montañas que bordea la costa, y que desemboca en ésta.

[1] Las medidas en kilómetros son siempre aproximadas en estos límites y lo mismo cuantas otras cifras consignemos en el curso de este trabajo, que deben considerarse siempre como lo más aproximadas posible; pero nunca de exactitud matemática, pues carecemos de datos directos, tomados sobre el terreno, como habrían sido necesarios para obtener tal exactitud.

[2] Seguimos en esta descripción a Mr. E. G. Squier y a nuestra propia experiencia.

Conforme a los límites y al perímetro que acabamos de indicar, resulta que Honduras en cuanto a su territorio, ocupa el tercer lugar entre los Estados de Centro América. En efecto, la extensión de su superficie, en proyección, es de algo más de 154,305 kilómetros cuadrados espacio que por las desigualdades y accidentes del terreno, puede abrazar aproximadamente 160,000 kilómetros superficiales, o sean 16,000,000 de hectáreas de terreno.

Orografía.—Queda ya dicho que Honduras es un país montañoso, por lo que bien le cuadra su nombre, aunque no lo deba, como algunos suponen, a las irregularidades de su suelo; sino a las profundidades del mar en sus costas, lo que hizo, ante aquellas *honduras*, que los conquistadores dieran este nombre al golfo, y a todo el territorio cuyas son las costas que baña aquél.

La gran cordillera atraviesa el territorio en una dirección general de Noroeste a Sureste, siendo ella la gran división que separa las aguas que se derraman en el Atlántico de las que corren al Pacífico. Su recorrido es muy irregular, interrumpido por un ancho valle transversal.

La línea de la cordillera, al entrar en Honduras por la frontera de Guatemala, sigue al S. E. en tanto que un espolón de ella toma la dirección N. E. hasta la bahía de Honduras. En el punto de separación recibe el nombre de El Gallinero, Montaña del Merendón y La Grita. Cerca de la costa se denomina montaña o sierra del Espíritu Santo, y ya sobre la misma costa sierra de Omoa, con una altura de 2,000 a 2,200 metros (cerca de 8,000 pies).

Al pie de esta montaña, por el lado Norte, corre el río Montagua, y al Sur el Chamalecón que corre separado del Santiago, paralelo a él, por una línea de collados que termina en el llano de Sula, cerca de la boca del río Ulúa.

La cordillera sigue desarrollándose en un grupo de montañas conocidas bajo el nombre de montañas de Celaque, que encierran el valle de Sesenti, donde nace el río Santiago, con no menos de cincuenta y cinco kilómetros de largo por de treinta a treinta y seis kilómetros de ancho, y una sola abertura o garganta, que da paso al río Higuito o Talgua.

Estas montañas son una de las mayores alturas del país, pues se elevan de 2,200 a 2,700 metros. Al Este están separadas de los montañas de Patuca, de agudos picos, y de las montañas de Opalaca o Intibucá por un brazo del río Santiago, río Talgua, Higuito o del Valle a que antes nos hemos referido, y que en este otro brazo recibe el nombre de Mejocote o río Grande de Gracias.

Continúan altas planicies, la primera de ellas el valle a llano de Otoro, separado del de Comayagua por los Montecillos, línea de montañas formada por la verdadera cordillera, que cambia repentímamente de su curso de Este a Sur y se dirige al Norte, perdiéndose hacia la costa en varios ramales. Esta división forma otro valle, cerrado también, en el que está el lago de Yojoa o Taulabé.

El llano de Comayagua que tiene como una extensión de 74 kilómetros de largo por de 15 a 20 de ancho y cuyo eje principal es casi de Norte a Sur, está separado del llano del Espino, al Norte, por colinas bajas, que contrastan con la masa de altas montañas, conocidas como montañas de Comayagua, al Norte del llano, y como montañas de Lepaterique al Sur, las que se extienden por cerca de 148 kilómetros de Norte a Sur. En el centro de estas últimas montañas se encuentra un alto ramal llamado cerro de Hule.

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[1] Mr. Squier dice que el territorio de Honduras es "no menos que 39,600 millas cuadradas," lo que daría 135,788 kilómetros cuadrados próximamente. El licenciado Vallejo da al territorio hondureño una extensión de "124,190 millas inglesas o 319,760 kilometros cuadrados" (deberían ser las 124,190 millas, 425,847 kilómetros cuadrados): una y otra cifra son exageradas. La "Breve Reseña" da a Honduras 45,000 millas cuadradas o sean 154,305 kilómetros cuadrados, cifra que es la que parece más aproximada. En otros autores hemos visto las cifras de 119,820 y 120,480 kilómetros cuadrados que parecen desde luego muy reducidas.

Hacia el Este de las altas montañas de Comayagua, pasados el río y valle de Sulaco, se llega al grupo de altas montañas también, denominado montañas de Sulaco, situadas casi en el centro de Honduras y en las cuales tienen origen ríos muy importantes, que corren hacia el Atlántico, como el Aguán o Romano; y otros de menor importancia que van hacia el Sur.

De este que puede llamarse centro irradían también varias líneas de mantañas tan elevadas casi como las montañas principales. Al Noreste se extienden las nombradas montañas de Misoco.

Al Norte se extiende las montañas de Pija, que terminan sus numerosos espolones en los picos de Congrehoy, sobre la babía de Honduras.

Al Suroeste, con un curso muy tortuoso, la cadena de montañas, que es una verdadera cordillera, lleva el nombre de montañas de Chile.

En la base de las montañas de Sulaco están los llanos de Yoro y Olancho y al Norte de éste la sierra de Payas, ya sobre la costa. Al Sudeste las montañas de Colón, que no han sido exploradas.

La costa Norte de Honduras una parte es plana; pero por lo general, las montañas vienen a morir al mismo mar o se elevan a tan corta distancia, como ocurre en Trujillo, que parece como que el océano llega a estrellarse a sus pies. En la parte de la Mosquitia Hondureña, desde el Cabo Camarón hasta el de Gracias a Dios, la tierra es baja y no deja de haber pantanos, durante la estación lluviosa especialmente, existiendo allí grandes lagunas.

Según Squier, la elevación común de las montañas de Honduras, excepto los picos separados, no puede ser menos de 6,000 pies (1,671 metros). La plataforma de Tegucigalpa tiene una elevación de 3,400 pies (946.90 metros), la de Intibucá de 5,300 (1,476.05 metros) y la de Santa Rosa o más bien del departamento de Gracias en general, de 3,200 (891.20 metros) y el llano de Comayagua de 1,900 (528.20 metros). Las planicies de Yoro tienen, según el mismo Mr. Squier, la altura media de 3,200 pies (891.20 metros) o algo menos de la mitad de la altura de la gran plataforma de Méjico.

El Ingeniero americano Mr. William Cole tomó, en 1891, las alturas de diferentes lugares de la República, con los resultados siguientes:

	Pies ingleses.	Metros.
De San Lorenzo a Tegucigalpa:		
Nacaome	110	30
Pespire	200	55
Paso de Moramulca	390	108
La Venta	1,960	545
Sabanagrande	3,030	843
Nueva Arcadia	4,165	1,159
Cerro de Hule	4,690	1,306
Rancho Quemado	3,310	921
De Tegucigalpa a Comayagua:		
Tegucigalpa	3,000	835
Protección	4,000	1,114
La Cuesta Grande	4,050	1,127
Comayagua	1,650	459
De Comayagua a Santa Barbara:		
Agua Salada	3,950	1,100
Ococona	4,350	1,211
Siguatepeque	3,125	870
La Trinchera	3,550	988
Taulabé	1,500	417
La Cúspide	2,150	598
San José	1,750	487
Agua Blanca	1,100	306
De Comayagua a Santa Rosa:		
Santa Bárbara	750	208
Guajiquiro	5,265	1,466
La Esperanza	4,950	1,378
Gracias	2,550	710
Santa Rosa de Copán	3,400	945

Por cuanto antecede puede verse que Honduras, como queda dicho, tiene la mayor diversidad de alturas y accidentes, con anchos aluviones, profundos y fértiles valles, llanos elevados y altiplanicies diferentes que si dan al suelo todos los aspectos posibles, también originan la mayor variedad de climas y con ellos las más variadas producciones, propias de cada uno de ellos, y como la población no corresponde a la extensión territorial, desde luego surge la aptitud del país para una gran inmigración inteligente, laboriosa y honrada.

Hidrografía—Mares.—El Océano Atlántico, en la parte de él denominada mar Caribe, baña la costa norte de Honduras, a la que dan los departamentos de Cortés, Atlántida y Colón, del que forma parte el extenso territorio de la Mosquitia, que bien merecería, para su desarrollo y explotación, constituir una entidad administrativa aparte. La pequeña extensión de costa que Honduras tiene en el Sur está bañada por el Océano Pacífico, que en aquella porción recibe el nombre de golfo o bahía de Fonseca. A éste concurren los departamentos de Valle y Choluteca.

Bahías, puertos y fondeaderos.—Sobre la costa norte de Honduras no existe otra que reciba este nombre que el pequeño golfo o bahía de Honduras, que baña sus costas hacia el extremo occidental de su territorio y las de Guatemala y de la colonia inglesa de Belice.

En el Sur se encuentra la ya citada bahía o golfo de Fonseca, llamada también de Conchagua. Es, según consigna Squier, una constelación de puertos, y la más hermosa de todas las del Pacífico. Tiene 92 kilómetros y medio en su parte más larga y como 55 y medio de ancho. La entrada del mar a la bahía es de casi 33 kilómetros. En la entrada, en línea, y casi equidistantes, están las islas de Conchagüita y Meanguera y las rocas llamadas *Farallones* que a la vez que defienden la bahía de las agitaciones del mar, dividen la entrada en cuatro canales, capaz cada uno de ellos para dar paso a buques de todos calados.

La bahía de Fonseca baña costas de El Salvador, Honduras y Nicaragua, siendo, sin embargo, de mayor extensión las de Honduras.

Entre los puertos, el más antiguo es el que se llamó Puerto Caballos, hoy Puerto Cortés, situado a los 15° 49′ de latitud Norte y a los 87° 57′ de latitud Oeste, sobre el mar Caribe. El puerto, o más bien bahía, es bastante grande, pues tiene casi 17 kilómetros de circunferencia. Además de extensa es profunda, teniendo un fondeadero seguro y de 24 a 65 brazas de agua; en la boca llega a 100 brazas la profundidad. Como se ve pueden entrar a este puerto buques del mayor calado. A las operaciones ayuda la circunstancia de que en este punto de la bahía de Honduras el flujo y reflujo es apenas perceptible. En la actualidad existe en Puerto Cortés un muelle de madera, recientemente construído, que permite que las operaciones de carga y descarga se verifiquen al costado mismo de los buques.

El puerto de Omoa está situado a los 15° 47′ de latitud Norte y a los 88° 3′ de longitud Oeste. Su anclaje es bueno y tiene de 2 a 7 brazas de fondo. Un poco fuera llega a tener hasta 67 brazas. Está resguardado por una cadena de montañas altas que parte de la Sierra Madre, en el departamento de Gracias, viniendo a morir en las inmediaciones de Puerto Cortés. Este puerto había llegado a perder totalmente su importancia desde la traslación de su aduana a Puerto Cortés. En la actualidad parece que volverá a recobrarla con motivo de la línea férrea que tendrá en él su término, lo que hace que ya se piense en crear allí de nuevo una aduana, con lo que el viejo puerto español, por donde en tiempo de la Colonia se hacía todo el tráfico para Honduras y Guatemala, recobrará algo de su antigua actividad. En Omoa abunda el pescado y las tortugas.

Entre el cabo *Salsipuedes* y punta *Hisopo* hay una amplia bahía denominada antes *Triunfo de la Cruz*, como de 27 kilómetros de ancho por unos 10 de fondo. En ella existen los pequeños puertos de *Puerto Sal*, a poca distancia del cabo. El máximo de fondo en él es de 9 brazas. Cierran el puerto hacia el Norte, algunas rocas altas denominadas del *Obispo*, bajo las cuales hay un buen anclaje.

Tela, el antiguo *Triunfo de la Cruz*, es otro pequeño puerto abrigado de los vientos y con buen fondeadero para los barcos. La profundidad de sus aguas varía de 11 a 16 brazas.

Siguiendo la costa hacia el Oriente, está el activo puerto de La Ceiba, con muelle para la carga y descarga y línea férrea comercial que viene a morir en él. La Ceiba es propiamente una rada abierta más bien que un puerto. Es, sin embargo, de gran movimiento relativo.

Balfate es también un puerto pequeño, algo abrigado y en el que pueden fondear buques de poco calado.

Trujillo, puerto antes de gran importancia, forma una hermosa bahía que cierra la llamada Punta Castilla. Su extensión de Norte a Sur es como de 14 kilómetros, por 6 próximamente de Oeste a Este. Su fondo es muy variable. Cerca de la costa apenas llega a 4 brazas; en el fondo del arco formado por punta Castilla, llega a 22 brazas; y a 30 hacia la misma punta. Para el servicio de este puerto no existe muelle; pero sí se construye en la actualidad una línea férrea que ha de poner en comunicación este puerto con el departamento de Olancho, seguramente con gran provecho de aquél y de éste también, pues podrá sacar fácilmente sus abundantes productos. La situación de este puerto es de 15° 55′ de latitud Norte y 86° de longitud Oeste.

El puerto de Iriona es el último que tenemos que mencionar de los hondureños situados en la costa Norte. Se halla situado a los 15° 53′ de latitud Norte y a los 85° 13′ de longitud occidental. No hay en él verdadero puerto. Sin embargo, por su situación respecto al vasto territorio de la Mosquitia, es puerto importante y lo será mucho más en el porvenir. Su profundidad no es muy grande. Cerca de la costa no pasa de 6 a 7 brazas en el mayor fondo.

En Roatán y Guanaja hay también muy buenos fondeaderos, lo mismo que en la isla de Utila, todas ellas pertenecientes al departamento de las Islas de la Bahía; en la última de las mencionadas existe, al Sur, un buen puerto. Su aproximación es difícil, sin embargo, y necesita de práctico por estar dichas islas rodeadas de arrecifes de coral y de cayos.

En toda la costa Norte de Honduras existen numerosos puntos en los cuales pueden anclar los buques en circunstancias bonancibles. En las bocas del Chamalecón, del Ulúa, Lean, Río Negro, Patuca, en la laguna de Caratasca y aun en el mismo Cabo Gracias a Dios existen radas con buenos fondeaderos, seguros en todas las estaciones del año, excepto en el invierno, en la época en que soplan los vientos del Norte, contra los cuales la casi totalidad de ellos no están defendidos.

Al Sur de Honduras no existe, en la tierra firme, puerto alguno capaz de dar entrada a los grandes buques; sino puertos interiores en los cuales terminan los esteros que se irradian de la bahía de Fonseca, y por los que, sólo pueden hacer el tráfico barquitos de muy poco calado. El principal de estos puertos llamados menores, es hoy el de *San Lorenzo*, por el que se realiza el desembarco de todas las mercaderías destinadas a los departamentos orientales de la República, incluso a la capital, Tegucigalpa. El de *La Brea*, antiguo puerto por el que se efectuaba antes el tráfico mencionado. Es de más porvenir que el de San Lorenzo por su proximidad a la isla de Zacate Grande con la que puede unirse fácilmente, viniendo a constituirse

así el desideratum de un puerto para buques de gran calado, directamente, en el Pacífico. *El Aceituno,* puerto interior que da paso al tráfico con Comayagua y los departamentos occidentales y el de La Cutú.

Puerto marítimo importante en el Pacífico no tiene Honduras sino el de *Amapala,* en la isla del Tigre. Su anclaje es muy claro y sus aguas profundas por manera que en él pueden entrar y fondear buques de gran calado. Su bahía es extensa y muy abrigada.

En el mismo golfo de Fonseca existen de Honduras dos pequeñas bahías: la del *Chismuyo* al Norte de la isla de Zacate Grande, en la que desemboca el río Nacaome y la formada por el San Lorenzo, un gran brazo de agua al Este de la misma isla.

Ríos.—La verdadera cordillera que atraviesa el territorio hondureño y a la que ya nos hemos referido, constituye la gran división que separa las aguas y forma por consecuencia las dos vertientes que van al Atlántico y al Pacífico.

Numerosos son los ríos que desembocan en el Atlántico, por territorio hondureño, muchos de ellos navegables en una extensión considerable de su curso. Los principales son: el Motagua, Chamalecón, Ulúa, Lean, Aguán o Romano, Tinto o Negro, Patuca y Segovia o Wanks. En el Pacífico los ríos principales son el Choluteca, Nacaome y Goascorán. De todos ellos son navegables naturalmente en más o menos extensión de su curso, el Motagua, el Ulúa, el Aguán, Tinto, Patuca y Segovia en el Norte y Choluteca en el Sur.

El *Motagua* que nace en territorio de Guatemala, baña luego el de Honduras, para desembocar en la bahía de este nombre después de haber corrido por la base Norte de la montaña de Omoa. Al caer al mar se divide en tres brazos principales que dejan entre sí dos islas; una, la occidental, de la forma aproximada de un triángulo equilátero.

El *Chamalecón* es un río de bastante largo; pero recorre comparativamente una sección estrecha del país y debe a ésto el no ser caudaloso. Su corriente es rápida y está llena de bajos.[1] Nace en la falda oriental de la montaña del Gallinero, en la cordillera del Merendón, a pocas leguas al Noroeste de Santa Rosa de Copán; riega los departamentos de Copán, Santa Bárbara y Cortés y corre al pie de la montaña de Omoa, al Sur, separado por una línea de colinas del río Santiago, que sigue paralelo a él, terminando aquéllas en el valle de Sula y desembocando el Chamalecón al Oriente de la laguna de Alvarado, con la que está unido por un canal artificial de fecha reciente.

El *Ulúa,* es el río más ancho de Honduras y por consiguiente el que mayor caudal de aguas vierte en el Océano, al oriente del Chamalecón, excepto tal vez el Segovia, después de haber recorrido una gran extensión de territorio, que comprende casi la tercera parte de él. Lo forman la reunión de los ríos Venta o Santiago, Blanco y Humuya.

El Santiago, como ya hemos dicho, nace al Sur del valle de Sensenti, departamento de Copán, en la falda del cerro la Canguacota. Se le conoce en su curso bajo el nombre de río del Valle, Alax, Higuito, Talgua y Venta, este último nombre y de Santiago lo toma desde su entrada al departamento de Santa Bárbara. Sus afluentes principales son: el Mejocote, que nace en la montaña de Celaque, y el Santa Bárbara, que se alimenta de las aguas de las montanãs de Montecillos y Opalaca. El río Blanco es uno de los desagües del lago de Yojoa. Es angosto; pero profundo y rápida su corriente. Desaparece como a una milla del lago y sigue subterráneo de 8 a 12 kilómetros.

El Humuya está formado por el río Guangollo, que baja de la montaña del Cedral, por el Jupuara que procede de las montañas de Lepaterique, y por el

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[1] Squier.

San José o Flores que nace en la montaña de Zambrano cercano de la villa de San Antonio.

Los tres ríos mencionados se unen en el paso de La Maradiaga,[1] y luego, desde este punto hasta su unión con el Blanco y el Santiago para formar el Ulúa, lleva la corriente común el nombre de Humuya. Con este nombre atraviesa el valle de Comayagua, de Norte a Sur, y el de El Espino, continuando su curso en los linderos de los departamentos de Cortés y de Yoro. Cerca de Concepción recibe las aguas del río Sulaco, que desciende de la montaña del mismo nombre. Más adelante se le une el río Frío y otras corrientes de menor importancia.

Cerca de Potrerillos se verifica la unión de los tres ríos y hasta su desembocadura el caudal de sus aguas lleva el nombre de Ulúa, regando el extenso y fertilísimo valle de Sula, célebre por su producción de bananos.

El Ulúa es navegable en todo tiempo unos 260 kilómetros de su curso (52 leguas). Su barra tiene unos dos metros y medio de profundidad (9 pies ingleses) y en su curso lleva de 2 metros 22 a 3 metros 34 centímetros de agua (de 8 a 12 pies). Al Este del pueblo de su nombre tiene una ensenada que se extiende a casi 170 metros del río, por la que los buques pueden llegar a tierra sin riesgo y con relativa facilidad, y encontrar allí un anclaje de excelente asidero, según Blunt.

El *León o río de los Leones* nace al Noroeste de la ciudad de Yoro, en las montañas de Nombre de Dios. Sus tributarios principales son el Agua Caliente y el Silamo. Desde su desembocadura hasta el lugar denominado Cangélica es navegable en una extensión como de 120 kilómetros.

El *Aguán o Romano*, río caudaloso y muy extendido que nace en las montañas de Sulaco, cerca de Yorito, en el departamento de Yoro, y después de recorrer una extensión total como de 222 kilómetros, desemboca en el mar al Este de Trujillo y de Punta Castilla. A poco de su nacimiento recoge las aguas de los ríos Jalegua y Locomapa y más adelante las del Vega y otros más insignificantes. Sus principales afluentes son el Mangulile, Mangualil o Mirajoco, notable desde la época de la Colonia por la riqueza aurífera de sus arenas; nace en el distrito de Jocón, en el departamento de Olancho, y el Mame. Recorre los valles de Olanchito y Sonaguera y sus riberas, fertilísimas, tienen maderas preciosas, minerales ricos y otros productos explotables. La barra de este río, en la boca principal de las tres porque desagua en el mar Caribe, es relativamente favorable y buques de pequeño calado pueden navegar sobre 350 kilómetros río arriba, con un promedio de profundidad de 1 metro 39 centímetros a 2 metros poco más o menos. Atravesando como atraviesa muy ricas y extensas regiones, el problema de la practicabilidad de la navegación por este río es de grandísima importancia.

El *Tinto* o *Negro* está constituído por dos ríos enteramente distintos que proceden, el de la izquierda, de la montaña de Ardón en que tiene su origen, una de las que forman el llamado valle de Agalteca; lleva los nombres de *Sico*, *Grande* y *Black*; y el de la derecha que se denomina río *Paón*, parte del lado Este de las dichas montañas y sigue sólo hasta el lugar llamado Agua Caliente, en el que se une con el Sico o Grande, siendo entonces conocido bajo los nombres de *Poyer* o *Poyas*. Cerca ya de la costa, se divide en tres brazos: Uno desemboca en la laguna de Criba o de río Negro y lleva este mismo nombre, y los otros dos brazos van directamente al mar. Su extensión total es como de 222 kilómetros. La barra de este río es mala y variable, y su calado varía, según las estaciones, de 1 metro 39 centímetros a 2 metros 50 centímetros.

[1] El apellido español *Madariaga* se convierte en Honduras, por lo general, en *Maradiaga*. Hasta personas bien educadas lo escriben así.

Buques muy pequeños pueden entrar al río y recorrer en él una extensión de 70 a 111 kilómetros. Las vegas de este río, especialmente de donde se separa el brazo principal que va a unirse a la laguna de Criba o de río Negro, son muy abundantes en maderas, pinos especialmente, de muy buena calidad y muy ricos en resinas y aceites esenciales. Los dos troncos del río Negro tienen numerosos afluentes. Los principales del de la izquierda o río Sico o Grande son el Tontagua, Tagua, Conquira y Resumidero, los cuales se unen a aquél por su orilla derecha. El río Paón tiene los siguientes afluentes principales, por la orilla izquierda: río del Guayabo, Guachiriquí, Agua Zarca, y Mangas; por la orilla derecha, los de Cuyamel, Zapotal, Venado, Guarasca, Quiniquine y Guapate.

El *Platano* está situado al Oriente del anterior, entre la laguna Criba o de Rio Negro y la Brewer. Caudaloso en su desembocadura en el mar, su curso es muy pequeño relativamento; riega, sin embargo, una región fértil, la que pone en comunicación directa con el mar. La barra está obstruída por pequeños bancos que dificultan la navegación. En cambio la corriente es más suave que en el río Poyer.

El *Patuca*, este río que es el más ancho de los de la costa Norte de Honduras entre el Ulúa y el Segovia, debe su origen a la reunión de los ríos *Guayambre*, *Jalán*, *Guayape* y *Telica*, engrosándolo otros muchos afluentes, algunos de importancia.

El *Guayambre* a su vez está formado por el río *San Francisco* que nace en la montaña de Dipilto, frontera con Nicaragua, y por el río *Almendros*, que tiene su origen en la falda Sur de la Montaña la Pita, en la sierra de Villasanta; desde arriba de los Calpules, en el valle de Jamastrán, se unen ambos ríos llevando el nombre de Guayambre. Sigue éste por el dicho valle, para el Oriente de la montaña de la Zacualpa y se une al Patuca arriba del punto llamado Las Flores, entre éste y el Cacao. Sus afluentes principales son el río Frío, por la orilla derecha, y el río Seale, por la izquierda.

El *Jalán* nace en el extremo Noroeste de la montaña del Chile, en el valle de Orica, entre el Tomate y Cuapa, uniéndosele casi en su desembocadura el río Piedra y más abajo de Guaimaca el del Rosario. Se une con el *Guayape* en el lugar denominado La Jagua, como a 7 kilómetros de Juticalpa, siguiendo ambos con el nombre del primero hasta su unión con el Telica.

El *Guayape* baja de la montaña de la Flor y desde allí sigue su curso hasta adelante de la *Conce*, a 3 kilómetros próximamente de Juticalpa, donde se le une el río de este nombre; en la Jagua ya dijimos desemboca en él el río Guayambre y en el lugar denominado Los Encuentros se le reune el Telica. Este río, como el Guayambre, y aún más que éste, es muy renombrado por sus arenas auríferas, arrastrando su corriente pepitas de oro, algunas de bastante tamaño y valor.

El *Telica* nace en la montaña de Salamá, reuniéndosele en su curso varios afluentes, entre ellos el río Enemigo, a poco de su nacimiento; el río de Manto, que tiene su origen en la jurisdicción del pueblo de este nombre y se une al Telica muy al Sur de San Francisco de la Paz. En Los Encuentros hemos dicho ya que desemboca en el Jalán y Guayape, unidos bajo este último nombre, y llevando desde este punto hasta el mar el de río *Patuca*. Adelante ya dijimos que se le reune el Guayambre. A poco de la desembocadura de éste, el Patuca tiene los llamados *chiflones*, los raudales denominados *Las Campaneras* y *las Corrientes de Caoba* y a poco una extrechura muy peligrosa llamada *Puerto Delón*. Todavía tiene este río otro mal paso que dificulta la navegación, y es la terrible estrechura denominada *Portal del Infierno*, donde el río se precipita por entre rocas escarpadas, formando un arco como de 500 varas por el cual desciende en corriente muy fuerte y rápida. Desde allí el Patuca atraviesa la

Mosquitia y desagua por dos brazos: el uno, que conserva su nombre de río Patuca, desemboca directamente en el mar y el otro brazo recibe el nombre de Toomtomm o Tom-Tom y va a morir en la laguna de Brus o Cortina. La boca principal del Patuca tiene una barra irregular y peligrosa, corrientemente con de 2 metros 22 a 2 metros 78 centímetros de agua, caudal que aumenta por breve tiempo durante las lluvias.

Acerca de la longitud de este río se hacen cálculos muy diversos: desde Haly que le da 510 millas (944.520 kilómetros), lo que es absurdo, hasta Strangeways que fija su curso en 100 millas (185.200 kilómetros) únicamente. La longitud más aproximada es de 222 kilómetros o millas 120. Roberto calcula dicha longitud en 150 millas (277.800 kilómetros).

La boca del brazo del Patuca, que se une a la laguna Brewer es ancha; pero su calado es algo inferior al del brazo principal ya mencionado.

El río Patuca es navegable para buques de poco calado hasta el Portal del Infierno. Sin embargo, ha habido quienes, constantemente suban carga por el Patuca en cayucos y bongos, hasta la desembocadura del Guayambre, y aun hasta la unión del Jalán con el Guayape.

Las márgenes del Patuca están cubiertas de bosques frondosos de maderas, siendo muy grande la cantidad de caoba, cedro, rosa y palo de Santa María; pero principalmente los que más abundan son el pino, de muy buena calidad, y la encina. En aquellos bosques se produce también la zarzaparilla, el caucho (hule), la vainilla y muchas resinas valiosas como el copal.

Los afluentes principales de este río son: el río Guineo y el Tabaco; el Tinto de Olancho, el Pataste o Wasprasni, el Cuyamel formado por éste y el Blanco, el Guampim, a formar el cual contribuyen el Pucuyo y el Pan, este río se denomina también Wampú; el Pimienta, Guatanga, Cusva, Copara y Upurra o río del Retiro. Existen también el Armac-was, el Was-pres-senia y otros.

El *Coco, Herbias, Wanks* o *Segovia* y también *río del Cabo*, es el último de los ríos de la costa Norte de Honduras. Desde su desembocadura en el mar por su brazo principal, el *talweg* del río Segovia, hasta su encuentro con el río Poteca, forma la línea divisoria entre Honduras y Nicaragua, conforme al laudo pronunciado por S. M. el Rey de España, el 23 de diciembre de 1906, en la controversia a que puso término entre Honduras y Nicaragua, sostenida inopinadamente por esta última desde 1858.

El río Segovia nace en el lugar denominado Portillo Liso, departamento de Nueva Segovia, en el extremo Noroeste de la República de Nicaragua, y sigue en dirección Noroeste hasta entrar en el mar en el cabo de Gracias a Dios, recorriendo, según Squier, 350 millas o kilómetros 648. La mayoría de los que han navegado por el río le calculan de 480 a 500 kilómetros, de recorrido. Desde casi el Ocotal, Nicaragua, es navegable en pequeñas canoas. Sin embargo, la navegación propiamente tal, pues se hace por buques de algún tonelaje y calado, no se realiza sino desde la boca hasta las corrientes de Tiras y Quipisque, desde las cuales hasta el Pailla, existe una serie de corrientes que se suceden con rapidez, por algunas de las cuales no pueden pasar sino canoas descargadas, que, a las veces, hay que conducir por tierra. Desde las corrientes antes mencionadas hasta la boca, el río es tan tranquilo que necesitan de remo las embarcaciones menores que lo recorren para bajarlo. Los vapores que hacen su tráfico no tienen obstáculo alguno en su camino. Al desembocar el Segovia en el Océano lo hace por dos brazos principales: el mayor va al propio cabo Gracias a Dios, donde termina el territorio hondureño como hemos dicho, por lo cual no nos ocuparemos de la bahía que forma ni tampoco de los afluentes que vierten sus aguas en la orilla derecha del Segovia, y que corresponden ya a terreno nicaragüense.

En la orilla, izquierda, hondureña, desembocan los afluentes que siguen, como más importantes: los ríos Poteca, Misprasni, Canan, Cuaniguas y Rus Rus.

En la misma costa Norte de Honduras existen otros ríos que van a derramar sus aguas en el mar Caribe o en las lagunas inmediatas a él, que por su poca importancia no hacemos sino mencionarlos. Sobre el golfo de Amatique se encuentra el río Cuyamel; en el valle del Chamalecón, el Bermejo, el Blanco y el Blanquito; en el del Ulúa, el Chasnigua; el Tinto que desemboca en la laguna de su sombre. Siguen, en el departamento de Atlántida, el Tela, Platanar, Hicaque, Colorado, que es el más importante y desemboca en el Leán; Cuero, Leguán, San Antonio, Salado, Zacate, Porvenir, Bonito, Danto, Cangregal, Mapia, Cochabután, Ramírez, Tuliapa y Papaloteca, que divide el departamento expresado del de Colón; en éste los ríos Balfate, Miel, Payas, Caimanes, Sangrelaya, Paulaya o Tinto; Cristales y Chapgüe que van a morir al mar; el Guanaca en la laguna Ebano, el Tuas y el Sicri, en la Brewer; el Cruta y el Guarunta, en la laguna de este nombre; los ríos Cartago, Loco, Barunta, Cancara, Yamanta o Ibentara o Ibantara en la parte de la laguna de Caratasca llamada de Tausin; el Yapunta, al Sureste de la dicha laguna; el Croach o Croats en el Golfete de cabo Falso y el Tolmcara, Tabicuma o Tabancara, entre este último cabo y el Gracias a Dios.

Los ríos que desembocan en el golfo de Fonseca, sobre el Pacífico de alguna importancia son el Goascorán, el Negro y el Choluteca. Existen otros menos notables de los que también haremos mención.

El *Goascorán* corre casi al Sur y tiene su origen en las mismas sabanas que el Humuya, que corre hacia el Norte, por lo cual estos dos ríos que caminan en dirección contraria, cortan completamente, la cordillera de mar a mar, abriendo un valle transversal. Nace, pues, en las colinas que comienzan el valle de Comayagua y corre por una sucesión de terrazos angostos, siendo el menor de ellos en Caridad, donde el río rompe las montañas de Lepaterique. Su curso es de como 130 a 150 kilómetros. Desde su origen hasta que baja a las llanuras de la costa se denomina *San Juan*, y después hasta su desembocadura lleva el nombre de Goascorán. Desde su confluencia con el río *Pescado* hasta su entrada en el mar, forma el límite de Honduras con la República de El Salvador. Entre sus afluentes figura en el lado hondureño el río Apisapa, que nace en las montañas de Curarén.

El *Choluteca* o *Grande* nace en las montañas de Lepaterique y sigue en dirección Este y Nordeste hasta pasar por Tegucigalpa donde se le reunen el Guacerique y el Chimbo o Chiquito; desde aquí sigue rumbo al Norte, describiendo un semicírculo a Este y Sur, recorre las departamentos del Paraiso y Choluteca y desemboca en el golfo de Fonseca, pasando antes por la cabecera del último de los departamentos nombrados y por el pueblo de Marcovia. Sus afluentes principales son, en el departamento de Tegucigalpa, a más de los dos mencionados, el río del Hombre; en el de El Paraiso el de Yaguare, el Namale y el Salalica y Texiguat; y en el departamento de Choluteca, el Yusguare.

El *Negro*, que nace en el cerro de Caguasca, en la frontera de Nicaragua. Forma la línea de límites entre esta República y la de Honduras, desde su unión con el río Guasaule hasta su desembocadura en el golfo de Fonseca.

De menor importancia son los ríos:

El *Nacaome;* nace también en la montaña de Lepaterique, llegando a su desembocadura algo al Sur del puerto interior de La Brea, engrosado con el Verdugo, el Moramulca y el Chiquito de Pespiro. En la estación de las lluvias puede navegarse por el río Nacaome desde el mar hasta la población de aquel nombre.

El *Pedregal*, que nace cerca de Yusguare y pasa por Namasigüe, de donde parte otro pequeño afluente y se une más adelante con el Sampile.

Lagos y Lagunas.—En Honduras el único depósito de agua dulce que merece el nombre de lago, es el de Yojoa o Taulabé, llamado así indistintamente por hallarse cerca de las poblaciones de ambos nombres, aunque el de Yojoa es el dominante. Su extensión en el sentido de su longitud es de 35 a 40 kilómetros y en el de su ancho de 15 a 22 kilómetros.[1] En realidad su extensión exacta no es conocida. Es bastante profundo para ser navegable pues tiene de 2 a 7 brazas de agua, por lo cual ha de ser en lo porvenir un medio de comunicación eficaz para el desarrollo de una vasta zona. Desagua, como dijimos antes de ahora, por medio del río Blanco que lleva sus aguas al Ulúa, el cual, repetimos también, corre largo trecho subterráneamente entre las roturas de rocas volcánicas. También, según Bailey, desagua por el río Jaitique y se cree que el río Zacapa que nace a pocos kilómetros del mismo lago está formado o alimentado a lo menos, como el río Blanco, por las filtraciones de aquél. Esta creencia se funda en el hecho de que este río, dicen los vecinos de Zacapa, que, hace algunos años, era apenas una pequeña corriente aun en tiempo de lluvias, y en la actualidad es tan caudaloso, que aun en tiempo seco no es posible vadearlo las más veces. Este hecho de observación hace pensar en que siendo más alto que el del río el nivel del lago, las filtraciones de éste, aumentando la permeabilidad y la rotura del suelo, aumentan también la corriente del río que puede llegar a ser el más fuerte desagüe del lago.

En el corazón del departamento de Olancho hay otro depósito de agua dulce poco conocido, situado entre Gualaco y Culmí, que se conoce con el nombre de laguna de los Mezcales, en la que nace el río Tinto de Olancho que desemboca en el río Patuca, y el río Sico, Black o Negro y también Grande, que desagua en la laguna Criba por un brazo, y por otro en el mar Caribe.

En el mismo departamento de Olancho existe otra laguna, en la hacienda de Quebracho, como a 18 o 20 kilómetros de Juticalpa.

En el pueblecito de San Nicolás hay otra laguna pequeña, como también lo son la del Pedregal, cerca de Tegucigalpa, y la de Amapala, al Sur del alto del Vigía.

Sobre la costa Norte de Honduras existen otras lagunas de agua salada que se comunican con el mar, de las cuales la principal es la de *Caratasca* o *Cartago*.

Esta laguna está situada al Oeste del cabo Falso. Su aspecto es el de varias lagunas comunicadas entre sí, por lo que ha recibido nombres diferentes en porciones determinadas de ella, tales como laguna Tilba-Lacán, laguna Guarunta y laguna Tansing, y, por último, laguna Caratasca a la parte más inmediata al mar y separada de él por una faja de costa simplemente. Tiene varias islas que son las que aparentemente dividen en varias la única laguna existente. La principal de dichas islas es la *Tansing grande*, le sigue en importancia la de *Crut Crut*. Se calcula que esta laguna tiene como 66 kilómetros y medio de largo por 22 kilómetros de ancho (36 millas por 12). Tiene desde el mar dos entradas: la una es una pequeña ensenada de nombre *Tibacunta* o *bahía de Caratasca*. La boca principal es ancha y tiene de 2 a 3 brazas de profundidad. La laguna en su mayor parte no da una braza de agua; pero hay lugares en que varía la profundidad de 2 a 3 brazas.

[1] Squier da al lago 25 millas de largo por 3 a 8 de ancho (46 kilómetros 300 metros por de 5 kilómetros 556 a 14 kilómetros 816 metros). La "Breve Reseña" señala un termino casi idéntico, 25 millas por 8; don Fernando Somoza Vivas, en su "Guía de Honduras," fija el largo de este lago de Norte a Sur, en 85 kilómetros y su ancho, de Este a Oeste, dice que varía de 5 a 12. Según don Carlos Gutiérrez, don José Francisco Zelaya señala el largo de lago en 22 a 23 millas (40 kilómetros 742 metros) y el ancho de 3 a 9 millas (5 kilómetros 556 metros a 16 kilómetros 668 metros).

Desembocan en esta laguna, como ya dijimos, muchos ríos y arroyos, de los primeros, los ríos *Cruta*, *Guarunta* o *Wuarunta; Gibancara*, el que es más bien una caleta (*creek*); *Cartago*, *Loco* o *Locca; Barunta*, *Cancara* o *Caucari;* éste y el *Cartago* arrastran arenas auríferas, y el *Yamanta* o *Ibentara*. En las cercanías de la laguna de Caratasca existen hermosas sabanas con buenos pastos y al Sur de la laguna, sobre unas lomas, hay gran cantidad de madera de construcción, muy desarrollada. También, algo más lejos, excelentes caobas y cedros de la mejor calidad.

Es enteramente errónea la tradición conservada entre los aborígenes de Caratasca acerca de que, de aquellos lugares, salían para Méjico las fabulosas riquezas que en oro hacían exportar los emperadores aztecas. El error proviene de que, con efecto, los dichos emperadores habían establecido en la costa Norte de Honduras, en lo que se denominó *El Dorado*, y en lo que hoy es el departamento de Olancho, una a modo de colonia que se ocupaba en extraer el oro de los placeres y ríos que con tanta abundancia lo tenían o arrastraban en aquella región remitiéndolo seguidamente a México. En documentos fidedignos del tiempo de la Conquista se consigna esta tradición.

Siguiendo de Caratasca hacia Occidente, se encuentra la laguna *Brewer's*, *Bruss* o *Cartina* que fué el nombre con que primero fué conocida. Tiene también dos entradas por el mar y dos pequeñas islas; desembocando en ella, como queda dicho, el brazo del Patuca denominado *Zoom-tomm creek*. Esta laguna apenas tiene 18 kilómetros y medio de extensión y su profundidad en la barra es de poco más de una braza.

La laguna *Criba* o *del río Negro*, la parte inferior de la cual, en la que hay dos pequeños islotes, se denomina laguna *Ebano*, se halla al Occidente de la anterior, sobre la misma costa. Tiene una sola entrada por el mar, en la parte más cercana al cabo Camarón. Su largo es como de 27 kilómetros y su ancho como de 13. En esta parte de la costa de Honduras y en las islas de esta laguna tuvieron los ingleses, hasta el año de 1786, un establecimiento que explotó los pinares allí existentes, la pez, la trementina y la goma.

Al Oriente de Trujillo está la laguna de Guaimoreto, de muy pequeña extensión, apenas unos 12 o 14 kilómetros de largo, con una entrada a ella por la bahía de Trujillo. Más al Oriente aún se encuentra la muy pequeña laguna de *Chopagua*, con entrada directa por el mar, que forma una pequeña caleta.

La laguna *Quemada* se encuentra en la misma costa, al Oeste del puerto de Tela. Parece dividida en dos, que reciben los nombres, la más occidental, de laguna *Quemada* y la oriental laguna del *Mico*. Tiene una sola entrada por el mar en la parte que corresponde a la última denominación. Apenas tendrá esta laguna unos 10 kilómetros de extensión.

La última de las lagunas de la costa Norte hondureña es la de *Alvarado* situada al Sudeste de Puerto Cortés y que parece destinada por la naturaleza para el ensanche de dicho puerto, si llega a establecerse una comunicación apropiada con él y se perfecciona a su vez la ya construída que la enlaza con el río Chamelecón.

Islas.—Honduras posee islas importantes en los Océanos que bañan sus costas. En el Atlántico se halla entre los 85° 48′ y los 87° 3′ de longitud Oeste y los 16° 7′ y los 16° 34′ de latitud Norte el grupo de islas que constituyen en la actualidad el departamento hondureño de Islas de la Bahía. Lo forman las de *Roatán*, escrito también *Ruatán* y *Rattan; Guanaja* o *Bonaca; Utila*, *Barbereta*, *Elena* y *Morat* y numerosos islotes y cayos dependientes de ellas.

Estas islas aun cuando geográficamente siempre han formado parte del territorio hondureño, y por consecuencia del de Centro América, antigua

capitanía general de Guatemala, como lo demuestra el hecho de que en 1782, el capitán general del Reino, don Matías de Gálvez, al frente de tropas de Guatemala y de otras de las provincias de su mando, se apoderó de Roatán, desalojando de allí a los ingleses que lo ocuparon indebidamente, han sido siempre muy codiciadas, por su magnífica situación, que las hace "la llave de la bahía de Honduras," según Alcedo, hasta el punto de que en 1852, a 11 de julio, el superintendente de Belice declaró las islas dichas *colonia británica*, en nombre del Reino Unido, bajo el nombre de Colonia de las Islas de la Bahía. Pero, como en 1850, a 11 de abril, la Gran Bretaña había ajustado con los Estados Unidos el famoso tratado Clayton-Bulwer, en el que se consignó que "*ni los Estados Unidos ni la Gran Bretaña podrán ocupar, fortificar, colonizar ni ejercer dominio sobre parte alguna de Centro América, ni hacer uso de protectorado de ninguna clase,*" la Comisión de Relaciones Exteriores del Senado de los Estados Unidos declaró: "*que las islas de la Bahia eran de Honduras y que su ocupación por la Gran Bretaña constituía una violación del mismo tratado.*"

Consecuencia de esta declaración y protesta fué el tratado de 29 de noviembre de 1859 entre Mr. Charles Lennox Wike, representante de la Gran Bretaña y don Francisco Cruz que lo fué de Honduras, por el artículo primero del cual tratado se estipuló que: "*Su Majestad Británica convenía en reconocer las islas de la Bahía, Roatán, Guanaja, Helena, Utila, Barbereta y Morat, conocidas por las Islas de la Bahía, y situadas en la bahía de Honduras, como una parte de la República de Honduras.*" Desde el 21 de abril de 1861 en que, en cumplimiento del artículo citado, fueron devueltas las dichas islas a Honduras y entregadas a su comisionado don Rafael Padilla Durán, han estado en posesión pacífica de la República.

La principal de las Islas de la Bahía es la de *Roatán*, con su capital de este mismo nombre, situadas a los 16° 16′ de latitud Norte, y los 86° 33′ de longitud Oeste. Tiene como 55 kilómetros de largo por algo más de 16 de ancho. Según McGregor, extractado por Squier, "tiene un excelente anclaje, fácilmente defendido y el terreno es propio para el cultivo del algodón, café y otros productos de los países tropicales." El Capitan Mitchel, de la marina real inglesa, asegura que "la posición local de la isla es de una importancia grande, no sólo desde el punto de vista comercial, sino político." John Wright escribe que "Roatán y Bonaca, por sus buenos fondeaderos, fértil suelo y puro aire y gran cantidad de animales, peces y frutos y por su terreno elevado, son proverbialmente llamadas el Jardín de las Indias Occidentales, la llave de la América Española y un nuevo Gibraltar. Por sus fortalezas naturales se pueden hacer indomables, sosteniéndolas con una pequeña fuerza."

Roatán tiene montañas que se elevan gradualmente hasta la altura de 250 metros poco más o menos, siguiéndose unas a otras, interceptadas por valles de exuberante vegetación. Abunda la isla en piedra caliza, que constituye su principal formación, también en areniscas y cuarzo y las costas están formadas por masas de coral sobre las cuales la arena y la materia vegetal, arrojada por los vientos de las tierras próximas, han formado un suelo fertilísimo para cultivos variados.

Tiene buenos fondeaderos. Al Sur de la isla especialmente hay muchos, los más notables Coxen Hole o Puerto McDonald y Dixon's Cove, ambos bien abrigados, con agua dulce cercana lo que facilita la aguada para los barcos. Puerto Real es un extenso fondeadero. Todos ellos exigen en su entrada conocimiento del lugar y cuidadoso esmero, por estar rodeados de arrecifes de coral, lo que hace que los canales entre ellos, si bien profundos, sean muy estrechos. El comercio de frutas que esta isla y las demás del grupo hacen con

Nueva Orleans, es muy antiguo, habiéndolo activado y hecho floreciente el establecimiento de la navegación a vapor.

La *Guanaja* o *Bonacca* fué descubierta por Colón en su cuarto viaje, en el que, como queda dicho, también descubrió las costas de Honduras, en 1502. Según las cartas marinas inglesas, tiene 9 millas de largo por 5 de ancho (16 kilómetros 668 metros por 9 kilómetros 260 metros). De la tierra firme dista por la parte más cercana, como 92 kilómetros y de Roatán casi 28 kilómetros. Con esta isla está unida por una serie de arrecifes que dejan apenas unos pasos muy estrechos. Tiene buenos fondeaderos; pero con el mismo inconveniente de las entradas estrechas que en la isla de Roatán. Las aguas, sin embargo, no son tan profundas. También en Guanaja hay colinas de alguna elevación y abunda la piedra caliza. También se han registrado vetas de zinc. El clima de esta isla es muy saludable. Aseguran que sería una buena estación para convalecientes, no padeciéndose allí de las fiebres que en Roatán.

Utila es la más occidental de las Islas de la Bahía. Algo menos extensa que la Guanaja, tendrá como 14 kilómetros de largo por 8 o 9 de ancho en su mayor amplitud. Es de todas las islas de este grupo la más próxima a la costa firme. En sus alrededores se pescan muy buenos esponjas, las cuales pueden constituir un ramo importante de su exportación. Abundan también las tortugas; entre éstas el *carey* de buen tamaño y finura de su concha.

Las islas *Elena*, *Morat* y *Barbareta*, de las cuales ésta es la mayor y Elena la menor, son muy pequeñas islitas al Sur y al Este de la de Roatán, de la que las separan angostos y profundos canales, siendo también su origen madrepórico. En realidad están unidas a la isla de Roatán por arrecifes de coral. Barbereta es una isla alta, de buen clima y cubierta de bosques espesos. En Elena se explota en la fabricación de cal que es exportada, la piedra caliza que en ella existe y que da un producto de muy buena calidad.

Sobre el Océano Atlántico tiene Honduras también, mucho más al Norte y Oriente, las llamadas islas *Cisne*, en una de las cuales una compañía americana ha establecido una estación telegráfica inalámbrica ocasional,[1] por lo que es natural que pague al Gobierno el arrendamiento correspondiente, pues la soberanía de esas islas es indudablemente de Honduras. Son dos islas pequeñas, en español llamadas "islas Cisne" y por lo general conocidas con el nombre inglés de Swan Islands. Tienen bosques abundantes a una altura como de 16 a 20 metros sobre el nivel del mar. Según las cartas marítimas inglesas, corregidas en octubre de 1910, se hallan entre los 83° 52′ y los 83° 56′ de longitud Oeste su latitud Norte 17° 20′.

Pertenecen también a Honduras los islotes o cayos que se encuentran al Oriente del cabo Gracias a Dios: los cayos *Hobbies* comprendidos entre los 83° 5′ los 83° 18′ de longitud Oeste latitud Norte 16° 17′, el cayo *Viborilla*, 83° 16′ de longitud Oeste y 15° 49′ de latitud Norte; el cayo Foca, los de cabo Falso, etc.

En el Sur en el Océano Pacífico, o sea en el golfo de Fonseca, tiene Honduras varias islas, de las que las principales son la de *El Tigre* y *Zacate Grande;* además forman parte del territorio hondureño las islas *Exposición*, *Güegüensi*, *La Guitarra*, *Ratón*, *Pájaros*, *La Vaca*, *Almejas*, *Sirena*, *Tigrito*, *Caracol* y otras, más bien islotes.

La isla del Tigre es la más importante de todas las mencionadas por existir en ella la población y el puerto de Amapala, que en los últimos años del siglo XIX fué el primero de la República por su movimiento comercial, y que todavía hoy conserva verdadera importancia, pues por él se hace el tráfico de y para la capital y su departamento, y los de Comayagua La Paz, Valle, Choluteca, El Paraíso y gran parte del departamento de Olancho.

[1] Occasional limited telegraph station.

La isla del Tigre forma un cono perfecto, que acusa su origen volcánico, siendo, aunque apagado, uno de tantos de la serie de ellos que existen en la bahía de Fonseca; se eleva a 695 metros sobre el nivel del mar, y tiene a uno y otro lado, por su parte Norte, dos montículos que le dan a la isla un aspecto de simetría verdaderamente notable. No obstante la altura indicada, el declive del cerro es en algunos puntos suave y permite que se hagan en él cultivos. Al Sur y al Oeste la lava forma barreras de rocas a las olas, hasta de más de 5 metros de altura. Al Norte y al Este hay playas planas aunque de no muy considerable extensión. El puerto, ya dijimos en el lugar respectivo, que es de gran profundidad y su anclaje muy claro y seguro. Su circunferencia se calcula en 222 kilómetros. Su largo es de 11 kilómetros y su ancho de 6. El tráfico con el interior lo realiza por los puertos interiores o menores de San Lorenzo, La Brea, El Aceituno, Las Conchas y el Pedregal.

Zacate Grande, isla situada al Nordeste de la del Tigre y tan cerca de ésta por su extremidad Sur que sólo la separa de ella un angosto canal, es la mayor de las islas: tiene como 13 kilómetros de largo por 7 kilómetros y medio de ancho. Corre por toda su longitud una serie de picos que llegan por el Sur hasta 556 metros de altura próximamente. Por el Norte estas elevaciones descienden hasta ponerse al nivel de las tierras bajas que son en extremo fértiles.

La isla recibe su nombre de una hierba que cubre sus montañas y a la que los indios llaman *zacate* y que es excelente pasto para el ganado. En la estación lluviosa existen y aún después varios arroyos en la parte Norte de la isla. Durante la estación seca el agua corriente escasea; pero puede obtenerse con facilidad y de buena calidad, escarbando en las capas de lava, bajo las cuales corren abundantes raudales.

La isla de Zacate Grande está muy inmediata a la tierra firme, por el lugar del antiguo puerto de La Brea, con el que hubo el proyecto, muy factible por cierto, de unirla por medio de rellenos y de un puente o viaducto que permitiera el tráfico hasta la parte Suroeste de la isla, frente al fondeadero del puerto de Amapala. La realización de este proyecto sería de gran provecho para el comercio interior del Sur y centro del país; pero la desaparición del puerto y población de Amapala sería su consecuencia inmediata. Debemos recordar que en esta isla se halla el ya mencionado puerto del *Chismuyo*, llamado también de *El Porvenir*.

Güegüensi se halla al Oriente de la isla de Zacate Grande de la que también está separada únicamente por un canal angosto. Tiene una sola eminencia de perfecta regularidad y lo demás de su superficie es plano, fértil y propio para ser cultivado con poco esfuerzo. No obstante los mangles que la rodean que hacen pensar en la existencia de pantanos en las proximidades de la isla, su terreno es seco y algo elevado.

La isla *Exposición* está frente a la población de Amapala y en el centro de su bahía. Tiene una ancha playa hacia el Norte y lo demás de la isla lo constituye un alto cerro que viene casi a morir en el mar. La carencia de agua en ella es casi completa, fuera de la estación lluviosa y aún en ésta es poco abundante.

Las demás islas hondureñas del golfo de Fonseca son más bien islotes pequeños, algunos bellísimos, como la isla de los *Pájaros*, llamada así por el gran número de ellos que allí anidan y existen de continuo; pero no tienen importancia bajo aspecto alguno que se les considere, siendo en ellas la falta de agua, por lo general, lo que más se opone a su población.

Divisiones.—La República de Honduras en conjunto puede ser considerada y clasificada bajo tres aspectos diferentes, natural, político y administrativo.

La división natural o físico-geográfica comprende dos secciones, tierra firme e islas.

En política, puede dividirse en dos grupos: Honduras departamental o puramente constitucional que comprende los 17 departamentos que la forman, semejantes en todos los ramos, económico, judicial, militar y civil y la Mosquitia hondureña, comarca que aun cuando incorporada al departamento de Colón, no puede asimilarse enteramente a las demás secciones del país, por la naturaleza y condiciones de su población, y exige regimen especial muy diverso al generalmente existente, lo que justifica que esta comarca no hace muchos años aún, tenía una organización particular, más conveniente en realidad que su incorporación nominal presente a uno de los departamentos de la República.

Bajo el aspecto de la administración y del gobierno, el territorio hondureño se divide en 17 departamentos, de los cuales 16 están en el continente y uno está constituído, como ya hemos dicho, por el grupo de islas del mar Caribe denominadas Islas de la Bahía.

Division civil.—Con el fin de hacer que se conozca mejor la extensión detallada de la superficie de cada departamento hondureño, su situación respecto a los mares y a las fronteras, la población que le sirve de capital, distritos que le corresponden, población y su número de habitantes por kilómetros cuadrado, hemos hecho el cuadro que sigue:

Departamentos.			Superficie en kilómetros cuadrados.	Distritos.	Población.	Número de habitantes por kilómetro cuadrado.
Situación.	Nombres.	Capitales.				
Marítimo......	Atlántida.......	La Ceiba......	4,597	La Ceiba, El Porvenir, Tela.	11,372	2.47
id.........	Cortés...........	San Pedro Sula	6,212	San Pedro Sula, Santa Cruz de Yojoa.	23,559	3.79
id.........	Islas la Bahía...	Roatán.......	373	Roatán..............	4,893	13.11
Marítimo y Fronterizo.	Colón...........	Trujillo.......	44,300	Trujillo, Sonaguera, Iriona.	11,191	0.25
id.........	Valle...........	Nacaome......	2,112	Nacaome, Goascorán, Amapala.	30,479	14.43
id.........	Choluteca.......	Choluteca.....	5,091	Choluteca, El Corpus, San Marcos, Pespire, Orocuina.	45,817	8.99
Fronterizo....	La Paz..........	La Paz........	3,230	La Paz, Marcala, Opatoro, San Antonio del Norte.	28,764	8.90
id.........	Intibucá........	La Esperanza.	2,738	La Esperanza, Camasca, Jesús de Otoro.	27,285	9.96
id.........	Gracias.........	Gracias........	3,355	Gracias, Guarita, Candelaria, Erandique.	49,955	14.88
id.........	Copán...........	Santa Rosa...	4,547	Santa Rosa, Cucuyagua, Santa Rita, Trinidad.	40,282	8.85
id.........	Ocotepeque.....	Ocotepeque...	2,285	Ocotepeque, La Labor.	28,190	12.29
id.........	Santa Bárbara..	Santa Bárbara	7,827	Santa Bárbara, Colinas, Trinidad, Quimistán.	39,064	4.99
id.........	El Paraíso......	Yuscarán.....	8,573	Yuscarán, Danlí, Texiguat.	42,118	4.91
id.........	Olancho.........	Juticalpa......	33,684	Juticalpa, Catacamas, León Alvarado, Manto, Salamá.	43,368	1.28
Interior.......	Comayagua.....	Comayagua...	4,970	Comayagua, San Antonio, El Rosario, Siguatepeque, Meámbar, Cabañas.	26,339	5.29
id.........	Tegucigalpa.....	Tegucigalpa...	10,024	Tegucigalpa, Valle de Angeles, San Juan de Flores, Sabana Grande, Reitoca, Cedros.	81,844	8.16
id.........	Yoro...........	Yoro..........	10,437	Yoro, Olanchito, El Negrito, Sulaco.	18,926	1.81
			154,305		553,446	3.58

Los departamentos, además de distritos, comprenden *municipios* que son entidades político-territoriales formadas por uno o varios pueblos, bajo la denominación de uno de ellos y regidos por su respectivo *concejo* o municipalidad. Los municipios existentes en Honduras son los que siguen.

DEPARTAMENTO DE TEGUCIGALPA.

Distrito de Tegucigalpa.—Municipios de Tegucigalpa, Comayagüela y Santa Lucía.

Distrito de Valle de Angeles.—Municipios: Valle de Ángeles, San Antonio, Maraita y Tatumbla.

Distrito de San Juan de Flores.—Municipios: San Juan de Flores y Talanga.

Distrito de Sábana Grande.—Municipios: Sábana Grande, Santa Ana, Lepaterique, Ojojona, San Buenaventura, Nueva Armenia y La Venta.

Distrito de Reitoca.—Municipios: Reitoca, Alubarén, Curarén, La Libertad y San Miguelito.

Distrito de Cedros.—Municipios: Cedros, Orica, Guaimaca y Marale.

Total: 25 municipios.

DEPARTAMENTO DE EL PARAÍSO.

Distrito de Yuscarán.—Municipios: Yuscarán, Güinope, Oropolí y Morocelí.

Distrito de Danli.—Municipios: Danli, Potrerillos, Jacaleapa, El Paraíso, Alauca y Teupacenti.

Distrito de Texiguat.—Municipios: Texiguat, Soledad, Liure, San Lucas, San Antonio de Flores, Vado Ancho y Yauyupe.

Total: 17 municipios.

DEPARTAMENTO DE CHOLUTECA.

Distrito de Choluteca.—Municipios: Choluteca, Namasigüe, Santa Ana, y Marcovia.

Distrito de El Corpus.—Municipios: El Corpus, Concepción de María y El Triunfo.

Distrito de San Marcos.—Municipios: San Marcos de Colón, Duyure y Morolica.

Distrito de Pespire.—Municipios: Pespire, San Antonio de Flores, San José y San Isidro.

Distrito de Orocuina.—Municipios: Orocuina y Apacilagua.

Total: 16 municipios.

DEPARTAMENTO DE VALLE.

Distrito de Nacaome.—Municipios: Nacaome, Coray y San Lorenzo.

Distrito de Goascorán.—Municipios: Goascorán, Langue, Alianza, Aramecina y Caridad.

Distrito de Amapala.—Municipio: Amapala.

Total: 9 municipios.

DEPARTAMENTO DE LA PAZ.

Distrito de La Paz.—Municipios: La Paz y Cane.

Distrito de Marcala.—Municipios: Marcala, Santa María, Puringla, Yarula, Chinacla, Santa Elena, San José y Cabañas.

Distrito de Opatoro.—Municipios: Opatoro, Santa Ana y Guajiquiro.

Distrito de San Antonio del Norte.—Municipios: San Antonio del Norte, Lauterique, San Juan, Aguanqueterique y Mercedes de Oriente.

Total: 18 municipios.

DEPARTAMENTO DE COMAYAGUA.

Distrito de Comayagua.—Municipios: Comayagua, Ajuterique y Lejamaní.

Distrito de San Antonio.—Municipios: San Antonio, Lamaní, San Sebastián y Humuya.

Distrito de El Rosario.—Municipios: El Rosario (antes Opoteca), La Trinidad y San Jerónimo.

Distrito de Siguatepeque.—Municipios: Siguatepeque y San José de Comayagua.

Distrito de Meámbar.—Municipios: Meámbar, La Libertad y Ojos de Agua.

Distrito de Cabañas.—Municipios: Minas de Oro, Esquías y San José del Potrero.

Total: 18 municipios.

DEPARTAMENTO DE COPÁN.

Distrito de Santa Rosa.—Municipios: Santa Rosa de Copán, Opoa, Veracruz y El Dulce Nombre.

Distrito de Cucuyagua.—Municipios: Cucuyagua, Corquín, San Pedro y La Unión.

Distrito de Santa Rita.—Municipios: Santa Rita, Cabañas, Copán y El Paraíso.

Distrito de Trinidad.—Municipios: Trinidad, San José, San Nicolás, Nueva Arcadia, Florida y San Antonio del Descanso.

DEPARTAMENTO DE SANTA BÁRBARA.

Distrito de Santa Bárbara.—Municipios: Santa Bárbara, Ceguaca, San Francisco de Ojuera, Santa Rita, San Pedro Zacapa, Gualala, Ilama, Arada y Concepción del Sur.

Distrito de Colinas.—Municipios: Colinas, San Luis, Nueva Celilac, San Nicolás, Atima y Naranjito.

Distrito de Trinidad.—Municipios: Trinidad, Chinda y Concepción del Norte.

Distrito de Quimistán.—Municipios: Quimistán, San Marcos, Macuelizo y Petoa.

Total: 22 municipios.

DEPARTAMENTO DE INTIBUCA.

Distrito de La Esperanza.—Municipios: La Esperanza, Intibucá, Yamaranguila, San Miguel Guancapla, San Juan, Dolores y San Marcos de Sierra.

Distrito de Camasca.—Municipios: Camasca, San Antonio, Concepción, Colomoncagua, Santa Lucía y Magdalena.

Distrito de Jesús de Otoro.—Municipios: Jesús de Otoro y Masaguara.

Total: 15 municipios.

DEPARTAMENTO DE GRACIAS.

Distrito de Gracias.—Municipios: Gracias, El Conal, Lepaera, Colohete, La Iguala, Belén, Talgua, Las Flores y San Sabastián.

Distrito de Guarita.—Municipios: Guarita, Tomalá, Valladolid, La Virtud, Cololaca y Tambla.

Distrito de Candelaria.—Municipios: Candelaria, Virginia, Piraera, Gualcince y Mapulaca.

Distrito de Erandique.—Municipios: Erandique, San Francisco y San Andrés.

Total: 23 municipios.

DEPARTAMENTO DE OCOTEPEQUE.

Distrito de Ocotepeque.—Municipios: Ocotepeque, Sinuapa, Santa Fé, Concepción y Dolores Merendón.

Distrito de La Labor.—Municipios: La Labor, Sensentí, Belén, San Francisco del Valle, San Marcos, Mercedes, Lucerna, Fraternidad, La Encarnación y San Jorge.

Total: 15 municipios.

DEPARTAMENTO DE CORTÉS.

Distrito de San Pedro Sula.—Municipios: San Pedro Sula, El Paraíso (antes Choloma), Omoa, Puerto Cortés, San Manuel (antes Tehuma) y Villa Nueva.

Distrito de Santa Cruz de Yojoa.—Municipios: Santa Cruz de Yojoa, San Francisco de Yojoa, San Antonio de Cortés (antes Talpetate) y Potrerillos.

Total: 10 municipios.

DEPARTAMENTO DE YORO.

Distrito de Yoro.—Municipios: Yoro, Yorito, Jocón y Morazán.

Distrito de Olanchito.—Municipios: Olanchito y Arenal.

Distrito de El Negrito.—Municipios: El Negrito y Progreso.

Distrito de Sulaco.—Municipios: Sulaco y Victoria.

Total: 10 municipios.

DEPARTAMENTO DE OLANCHO.

Distrito de Juticalpa.—Municipios: Juticalpa, Campamento y San Francisco de la Paz.

Distrito de Catacamas.—Municipios: Catacamas, Santa María del Real y El Dulce Nombre.

Distrito León Alvarado.—Municipios: Gualaco y San Esteban.

Distrito de Manto.—Municipios: Manto, Guata, Jano, Esquipulas del Norte y Guarizama.

Distrito de Salamá.—Municipios: Salamá, Yocón, La Unión, El Rosario, Concordia, Mangulile, Guayape y Silca.

Total: 21 municipios.

DEPARTAMENTO DE COLÓN.

Distrito de Trujillo.—Municipios: Trujillo, Santa Fé y Balfate.

Distrito de Sonaguera.—Municipios: Sonaguera y Tocoa.

Distrito de Iriona.—Municipios: Iriona y Aguán.

Total: 7 municipios.

DEPARTAMENTO DE ATLÁNTIDA.

Distrito de La Ceiba.—Municipios: La Ceiba y Nueva Armenia.

Distrito de El Porvenir.—Municipios: El Porvenir y San Francisco.

Distrito de Tela.—Municipios: Tela y San Cristóbal.

Total: 6 municipios.

DEPARTAMENTO DE LAS ISLAS DE LA BAHÍA.

Distrito de Islas de la Bahía.—Municipios de Roatán, Guanaja y Utila.
Total: 3 municipios.

TOTAL GENERAL DE MUNICIPOS 253.

Echando una mirada sobre los estados que preceden se obtienen desde luego datos que es útil resumir.

1°. Se ve que todo el territorio hondureño comprendiendo la tierra firme y las islas, se divide en 17 departamentos de los cuales son marítimos 3; marítimos y fronterizos 3; fronterizos 8; e interiores 3.

2°. Que los 17 departamentos mencionados abarcan 62 distritos y éstos a su vez comprenden 253 municipios.

3°. Que, por las diversas combinaciones del territorio, de la población y de las necesidades que han debido ser satisfechas al constituir los departamentos, éstos son de extensión muy diferente, limitados desde 373 kilómetros cuadrados el de las Islas de la Bahía, a 44,300 el departamento de Colón, que comprende también toda la Mosquitia hondureña.

Casi para todas las ramas del servicio público y para todo aquello en que la acción del Gobierno central puede dejarse sentir, la división civil expuesta más arriba sirve de regla común. Se puede decir que el departamento representa la unidad territorial hondureña; es el tipo tanto para las divisiones más grandes, como para las más pequeñas. Las grandes demarcaciones, que existen sólo para lo judicial, como permanentes, y en forma transitoria, en circunstancias dadas, para lo militar, son grupos o aglomeración de departamentos que constituyen la jurisdicción de las cortes de apelaciones o de las zonas militares encomendadas a inspectores generales del ejército. Las pequeñas demarcaciones son fracciones de un departamento en distritos, municipios, etc.

División eclesiástica.—Honduras desde la conquista hasta la fecha ha constituido una sola provincia eclesiástica regida por un obispo, del título de Comayagua, sede titular de la diócesis, no obstante que, por circunstancias accidentales, el obispo está autorizado en la actualidad para residir en Tegucigalpa o en cualquier otro lugar de la diócesis. La residencia es, pues, accidental también, y no ha traído consigo la erección de nueva catedral ni ninguna otra reforma que modifique lo antiguamente establecido.

La diócesis de Honduras fué erigida en 1532, según unos autores, y en 1537, según los más, sin silla fija, siendo al principio Trujillo la residencia eventual del prelado y dependiendo como sufragánea de la archidiócesis de Santo Domingo, en la isla Española. No hay documento en que apoyar estos datos, que sólo por tradición no interrumpida ha llegado a nosotros, con visos de veracidad. En 1561, según el historiador Juarroz, o en los de 59 o 71 según otros, la sede episcopal fué trasladada a Comayagua, fundada en 1537, siempre como sufragánea de Santo Domingo. Al ser elevada al rango de metropolitana la silla de Guatemala, en 1745, la de Honduras fué declarada su sufragánea y así continúa en la actualidad, no obstante que, en 1912, Monseñor Cagliero, delegado apostólico en Centro América, con fines más políticos que religiosos, trató de proponer a la Santa Sede la división de esta diócesis, como lo había hecho ya con la de El Salvador y posteriormente lo hizo con la de Nicaragua, lamentable equivocación que en Honduras no llegó a cometerse merced a la respetuosa y a la vez a decidida energía con que fué rechazada por el entonces presidente de la República, general don Manuel Bonilla, tal división, actitud en que se mantiene también su muy digno sucesor el doctor don Francisco

Bertrand, teniendo en cuenta la conveniencia del país, la que resulta en favor de la misma Iglesia, considerando el asunto únicamente desde el punto del orden público, pues separada la iglesia del Estado, éste no tiene que hacer en lo que se refiere al régimen interior de la primera.

Existe, pues, repetimos, un solo obispo, que se titula de Comayagua, asistido por el cabildo catedral. Este se componía de derecho, anteriormente, y así se consignó en el Concordato celebrado en Roma en 9 de julio de 1861, entre la Santa Sede y Honduras, que no llegó a estar en vigor, de un deán, un arcediano, un maestrescuela y un tesorero, como dignidades; y de un canónigo penitenciario, otro lectoral, un canónigo de gracia, dos beneficiados o racioneros y dos medios racioneros. Privada la Iglesia de sus fundaciones, y no habiendo aceptado la asignación que le señaló a la supresión e incautación de aquéllas, el gobierno presidido por el doctor don Marco Aurelio Soto, hoy el cabildo refleja en su organización la penuria de la Iglesia. Se compone de un Deán que es a su vez Vicario general y Provisor de la Diócesis, con lo cual tiene rentas para subsistir, con los emolumentos que le producen estos últimos cargos, y de cinco canónigos que lo son de gracia y a la vez son curas párrocos de las parroquias del departamento de Comayagua, que viven de la congrua parroquial y que se reunen en cabildo al ser llamados por el Obispo. Dos de esos canónigos viven en Tegucigalpa, hoy residencia del Prelado, formando su consejo, con el Deán. La Mitra tiene además un secretario episcopal, notario eclesiástico y tesorero general diocesano.

En la diócesis hondureña existen 56 parroquias y 4 capellanías perroquiales. Muchas de éstas son tal vez tan antiguas como la diócesis y algunas quizá más; pero no se encuentran datos auténticos de sus respectivas fundaciones. Sabemos de manera cierta que el venerable pastor actual de la diócesis, Ilmo. señor don José María Martínez Cabañas, al hacer la visita pastoral a las parroquias de Honduras, no encontró datos relativos a las fechas de sus erecciones y ni siquiera con respecto a los límites de la jurisdicción de cada parroquia, por lo que, conformándose con la tradición, único dato que pudo tener a la mano, señaló en los autos de visita de cada una de aquéllas, sus respectivos límites jurisdiccionales.

Entre las parroquias citadas no existen diferencias de categorías, fuera de las cinco parroquias canonicales del departamento de Comayagua, que son por cierto las más incongruas y miserables de todo el obispado.

Las parroquias de Honduras están servidas por ecónomos, no existiendo curas propios, por lo cual todos son amovibles. La pobreza de las parroquias obliga a que ninguna de ellas tenga teniente cura. Las mismas parroquias canonicales están servidas por ecónomos pues no dan para que en ellas puedan vivir verdaderos titulares. Esto hace también que los curas se remuevan con gran frecuencia.

En Honduras existen 332 iglesias parroquiales y filiales, todas ellas pertenecientes a la comunión católica romana. La mayor parte de estos edificios está en muy mal estado y todos o casi todos han caído en el mayor deterioro, por falta de rentas propias y a nuestro juicio también por falta de iniciativas y de actividad de los fieles, que hace tiempo debieron constituir, dependientes de la jerarquía eclesiástica, asociaciones cultoras para éste y los demás fines del culto católico, como las hay de los pocos que profesan la religión reformada que existen en el país.

En la costa Norte existen extensas regiones a las cuales no llegan los servicios eclesiásticos, y donde precisamente habita la población más ignorante y miserable y por consiguiente la más necesitada de ellos, bajo el aspecto educativo y de la civilización. Esta necesidad pretendió remediarla Su Santi-

dad, al ser informado de ella, enviando unos cuantos sacerdotes paulinos, los cuales con el carácter de curas de las parroquias de la costa Norte, deberían hacer misiones en las tribus que aun moran en aquellas regiones. Hasta la fecha tales misiones no se han visto por parte alguna y los padres que debieron establecerlas se han limitado a servir los mejores curatos de aquella costa, que son a la vez los únicos que en el país tienen verdaderas congruas y permiten a sus titulares una vida cómoda. Los demás curatos pobres y las regiones pobladas por selváticos no han merecido atención alguna de los reverendos padres paulinos venidos como misioneros.

Tiene la diócesis seminario conciliar, establecido en Tegucigalpa, en edificio propio, grande, cómodo y bien ventilado. El rector y los profesores son sacerdotes alemanes de reconocida ciencia. No obstante esta circunstancia tan apreciable, el seminario no ha dado hasta ahora los frutos que eran de esperar. Sin entrar a averiguar la causa, que puede ser la rigurosa disciplina que debe haber en establecimientos de este género, citamos el hecho únicamente. En los años que lleva el seminario organizado sobre su base actual, ha sido constante el trasiego de alumnos, de los que tan sólo uno, que en aquella fecha era subdiácono, ha llegado a coronar su carrera, pues está próximo a recibir el presbiterado.

En la diócesis existen 70 sacerdotes católicos, de los cuales 57 son hondureños, 12 europeos y 1 costarricense.

División judicial.—La división que se relaciona con la buena administración de la justicia ordinaria para lo civil y lo criminal, se compone de una Corte Suprema de Justicia, con asiento en Tegucigalpa, compuesta por 5 magistrados; tiene 1 secretario, 1 fiscal y el personal subalterno necesario. 4 cortes de apelaciones, residentes 2 en Tegucigalpa, 1 para los asuntos civiles y 1 para los criminales; 1 en Comayagua que entiende para los asuntos de ambos ramos y 1 en Santa Bárbara en la misma forma, 1 juez de Letras (primera instancia) para los asuntos civiles exclusivamente en los departamentos de Tegucigalpa, Olancho y Copán, 2 jueces de Letras para los asuntos criminales en Tegucigalpa, y 1 en cada uno de las cabeceras departamentales de Olancho y Copán, 14 jueces de Letras, 1 en cada cabecera de los demás departamentos de la República, con jurisdicción civil y criminal y además 1 juez de Letras para ambos ramos en cada una de las poblaciones siguientes, que constituyen sendas secciones judiciales: en Danlí, Amapala, Marcala y Puerto Cortés. Cada juzgado de Letras tiene su fiscal y el personal subalterno que señala la ley de presupuestos. Cada municipio tiene además jueces de Paz para los asuntos civiles y criminales de menor cuantía. Estos son dos propietarios y dos suplentes en las cabeceras departamentales y en algunas otras poblaciones importantes y uno para ambos ramos en todos los demás municipios.

Las Cortes de Apelaciones ejercen su jurisdicción, conforme a la Ley de Organización y Atribuciones de los Tribunales, en los departamentos que siguen:

Las Cortes residentes en Tegucigalpa tienen por sección jurisdiccional los departamentos de Tegucigalpa, Olancho, El Paraíso, Choluteca y Valle.

La de Comayagua extiende su jurisdicción a los departamentos de Comayagua, La Paz, Yoro, Colón, Atlántida e Islas de la Bahía, y la de Santa Bárbara a los departamentos de Santa Bárbara, Cortés, Copán, Ocotepeque, Gracias e Intibucá.

División militar.—La República de Honduras constituye, en lo militar, una Comandancia general; su jefe es el Presidente de la República que en este concepto asume el título de Comandante general. En tiempo de

guerra da sus órdenes por medio del Secretario de la Comandancia general, sin intervención del Ministro de la Guerra.

Cada departamento constituye una Comandancia de Armas o sean 17 en total, hay también 3 comandancias: en Iriona, que comprende la Mosquitia; en Danlí, que forma una sección militar, otra la forma el distrito de Marcala, con comandancia también. Existen además comandancias principales en los puertos de Amapala y Puerto Cortés. En total, 22 comandancias.

De éstas dependen las comandancias locales de distrito, que son: en el departamento de Tegucigalpa, 9; en el de Gracias, 4; en el de Intibucá, 3; en el de El Paraíso, 5; en el de Yoro, 4; en el de Colón, 7; en el de Choluteca, 5; en el de La Paz, 4; en el de Ocotepeque, 4; en el de Atlántida, 3; en el de Copán, 4; en el de Santa Bárbara, 4; en el de Cortés, 5; en el de Valle, 3; en el de Olancho, 5; en el de Comayagua, 6; y 3 en el de las Islas de la Bahía. En total, 78.

Existen dependientes de estas últimas, subcomandancias locales de pueblo y subcomandancias locales de aldea. De las primeras hay:

En el departamento de Tegucigalpa, 17; en Gracias, 20; en Intibucá, 12; en El Paraíso, 12; en Yoro, 6; en Colón, 2; en Choluteca, 11; en La Paz, 10; en Ocotepeque, 11; en Atlántida, 3; en Copán, 14; en Santa Bárbara, 18; en Cortés, 7; en Valle, 6; en Olancho, 17; y en Comayagua, 14. En las Islas de la Bahía no hay ninguna. En suma, 180.

Comandancias locales de aldea, hay:

En Tegucigalpa, 43; en Gracias, 37; en Intibucá, 26; en El Paraíso, 56; en Yoro, 48; en Colón, 24; en Choluteca, 28; en La Paz, 13; en Ocotepeque, 54; en Atlántida, 33; en Copán, 82; en Santa Bárbara, 66; en Cortés, 41; en Valle, 18; en Olancho, 38; en Comayagua, 30; y en las Islas de la Bahía, 7. Total, 644.

Carreteras.—Desde que los conquistadores españoles cruzaron el territorio hondureño en los días en que se apoderaron de él, dejando trazadas con sus plantas las rutas que siguieron, éstas no sufrieron alteración ninguna, siendo las seguidas por el tráfico durante los siglos transcurridos, lo mismo en la época de la Colonia que después de la Independencia; y es lo cierto, que los caminos dejados por aquéllos son hoy los preferidos en sus trazos, pues fueron bien elegidos y los mejores que pudieron ser trazados.

Hasta muy avanzada la segunda mitad del siglo último no se trató de hacer caminos carreteros en Honduras, habiéndose comenzado la carretera del Sur o sea la de Tegucigalpa a San Lorenzo, durante la administración del doctor don Marco A. Soto. Posteriormente a ésta todas o casi todas las que la han seguido han prestado atención solícita a las vías de comunicación. La del general don Luis Bográn construyó caminos carreteros económicos de Tegucigalpa a San Lorenzo, de Tegucigalpa a San Juancito, a Yuscarán y a Comayagua, y de Comayagua a Santa Bárbara. El general don Terencio Sierra acometió la realización de la carretera del Sur; pero con la amplitud y solidez que puede observarse en esa hermosa vía. El general don Miguel R. Dávila acometió la apertura de la carretera de la capital, para Olancho; y fué sobre todos, el general don Manuel Bonilla quien mayor impulso dió a la construcción de carreteras, concluyendo la del Sur, comenzando la del Norte y contratando otras, ya directamente o por medio de concesiones. La administración actual del doctor don Francisco Bertrand en este ramo de vías públicas, como en otros muchos, ha realizado grandes progresos, reconstruyendo la repetida carretera del Sur, continuando activaments la de Olancho, con las obras de arte correspondientes; emprendiendo nuevamente los trabajos de la carretera del Norte y dando gran impulso a otras obras de la misma naturaleza, convencido como está el Gobierno de que el porvenir de Honduras depende de

que tenga vías fáciles y cómodas de comunicación y que de éstas han sido siempre y son en la actualidad las carreteras las que más las han facilitado, hoy mucho más que el automovilismo toma un gran desarrollo, y el que exige buenos y muy cuidados caminos. El automóvil resuelve los dos problemas acometidos por las vías férreas; pero con un costo infinitamente menor, cuales son el de la velocidad y el del arrastre de grandes pesos. Es, pues, el elemento de tráfico para todos los países y muy especialmente para los que no son suficientemente ricos o desarrollados para cruzar su suelo por vías férreas. Pero el tráfico de automóviles, exige, repetimos, buenas carreteras, pues sin ellas es imposible.

En la República existen 25 caminos carreteros[1] así: 3 en el departamento de Tegucigalpa, 2 en el de Cortés, 4 en el de Ocotepeque, 1 en el de Comayagua, 3 en el de Copán, 3 en el de Olancho, 2 en el de Intibucá, 6 en el de Choluteca y 1 en el de El Paraíso, casi todos en buen estado.

Figura en primer término entre todas, la ya repetida carretera del Sur que pone en comunicación a Tegucigalpa con el puerto interior de San Lorenzo, por el cual se hace todo el tráfico de y para el puerto marítimo de Amapala. Tiene 130 kilómetros de largo, por 10 metros de ancho en la mayor parte de su recorrido.

La carretera de Olancho parte también de Tegucigalpa; en la actualidad tiene concluídos 20 kilómetros de menor anchura que la anterior. Es ésta una vía que será de gran importancia en un futuro próximo, por atravesar regiones muy ricas y productivas.

La carretera del Norte, última de las de nueva construcción que parten de Tegucigalpa, pondrá en comunicación la ciudad de Comayagua con la capital y a ésta con la costa Norte.

Ferrocarriles.—Honduras ha sido desgraciada en no haber satisfecho su anhelo de ver cruzado su territorio de mar a mar, por una vía férrea, y, como consecuencia, en haber visto retrasado su progreso y desarrollo por falta de otras vías de comunicación, fáciles y baratas, que hasta muy recientemente no han empezado a ser proyectadas y construídas. No obstante fué Honduras el primero de los Estados del istmo que pretendió construir un ferrocarril interoceánico por su suelo cuando también se trataba de la construcción del ferrocarril de Panamá y se estudiaba la vía de Tehuantepec. Desde 1850 vino trabajándose en este asunto, que al fin pareció en vías de realización por la contrata celebrada para la construcción del repetido ferrocarril interoceánico, el 23 de junio de 1853 y ratificada el 27 de abril de 1854, siendo declarada ley de Estado el 28 del mismo mes y año. Pero tal contrata no tuvo otro efecto que el estudio del país y de la línea, por comisiones oficiales de ingenieros, no realizándose trabajo alguno definitivo y caducando la concesión. Otra tentativa de construcción fué la realizada directamente por el Gobierno de Honduras, de 1869 a 1872, mediante los empréstitos emitidos en Londres y en París en 1867, 1869 y 1870, tentativa también fracasada, y cuyos únicos resultados fueron la enorme deuda que se hace pesar actualmente sobre el nombre de Honduras, de legitimidad, la deuda, más o menos discutible, y un trozo de línea férrea de 108 kilómetros (53 millas inglesas) que es el actual Ferrocarril Nacional.

Por la primera vez desde el abandono de la empresa por los contratistas ingleses, el Gobierno de la República ha logrado, con los rendimientos mismos del ferrocarril, atender a la casi reconstrucción de la línea, desde 1911 hasta la fecha, y a la construcción del gran puente de hierro recientemente inaugurado, sobre el Ulúa, así como a la renovación y aumento del material rodante, proyectando continuar la línea al interior en la medida que sea posible.

[1] Memoria de Fomento, 15 de enero de 1914. Corresponde al año de 1912 a 1913.

El llamado Ferrocarril Vaccaro, por el nombre de los contratistas, corre por la costa Norte y tiene su estación central en La Ceiba; al fin del año último, 1914, tenía una extension de 137 kilómetros incluyendo en ésta sus ramales.

La nueva línea férrea llamada de Cuyamel, está destinada exclusivamente al servicio de la línea bananera constructora. En la actualidad cuenta ya con más de 10 kilómetros de vías en explotación.

La línea que construye la Hónduras Rubber Co. ha sido comenzada hace un año: tiene ya 10 kilómetros construidos en el municipio de Armenia, departamento de Atlántida.

El Ferrocarril Camors del puerto de Trujillo a la ciudad de Juticalpa, el de la Tela Railroad Co., de Tela a progreso; y el Ferrocarril Pan-Americano que correrá de la frontera de El Salvador a la de Nicaragua, han comenzado sus trabajos respectivos en forma que asegura su realización.

Además de los mencionados existen otros ferrocarriles que tienen trabajos emprendidos y que pertenecen a la United Fruit Co., a las Palmas Plantation Co., a la Tela Fruit Co., y a la E. P. Morse Timber Company Limited, las cuales líneas se dedicarán a la explotación de los negocios de cada una de las compañías constructoras y concesionarias.

Telégrafos.—Además de los hilos telegráficos de las líneas férreas y de otras líneas particulares que existen en el país por concesión especial, cuya longitud no podemos precisar exactamente, destinadas todas al servicio de las respectivas empresas, hay establecida una red de telégrafos y teléfonos para el servicio del Gobierno y del público. Esta red telegráfica que sigue en su mayor parte los caminos generales y los de travesía, tiene un desarrollo de 6,843½ kilómetros de extensión, de los que en el último año fueron construidos 1,674 kilómetros. El número de oficinas asciende a 256. Durante el último año el movimiento de correspondencia telegráfica, por las líneas del Gobierno fué como sigue:

Mensajes.	Número.	Palabras.	Valor.
Oficiales	475,721	13,193,525	$395,805.75
De servicio	39,973	767,405	23,022.15
Particulares	581,174	3,793,895	113,816.85
Suma	1,096,876	17,754,825	532,644.75

Comparando las cifras que anteceden con las del año anterior se observa un aumento de 66,028 telegramas con 1,125,890 palabras y valor de $3,776.70.

En Honduras no hay estación ninguna de telégrafo marítimo o sea de cable, haciéndose este servicio por medio de la estación de La Libertad, en El Salvador. También podría hacerse por las estaciones de San José, Guatemala, y por la de San Juan del Sur en Nicaragua.

El movimiento de despachos por cable fué:

Mensajes.	Número.	Palabras.	Valor.
Oficiales	99	1,527	$3,810.24
Particulares	3,009	25,027	57,692.54
Suma	3,108	26,554	$61,502.78

Este servicio aumentó también durante el año último en 742 despachos, 6,588 palabras y por valor de $18,285.03.

El servicio telefónico es internacional e interior. El primero se verifica con el Salvador, con un recorrido de línea de 427 kilómetros, de los cuales corresponden a Honduras 187.

El servicio interior cuenta con 95 estaciones telefónicas.

Población.—Según los cálculos hechos por la Dirección General de Estadística, basados en los documentos que reunió dicha oficina, la población de Honduras en 31 de diciembre de 1912, era de 578,482 habitantes; pero la base única oficial relativa a la población es el último censo levantado el domingo 18 de noviembre de 1910. Los resultados definitivos de éste no han sido publicados todavía. En él se omitió la población de los *zambos*, *payas* y *sumos* de la región de la Mosquitia y de los *jicaques* de Yoro, que representan una cifra bastante apreciable.

Según el censo mencionado Honduras tiene 558,857 habitantes de los cuales son hombres 273,368 y mujeres 285,489.

Por su estado civil se clasifican así: Son solteros 424,053, casados 104,794, viudos 29,055, y divorciados 955.

Por razas se agrupan de la manera siguiente: Ladinos 341,653, indios 90,469, blancos 27,980, negros 19,176, asiáticos 7,416, mulatos 18,274, mestizos 53,889.

Con respecto a su instrucción se clasifican como sigue: saben leer 135,153; son enteramente analfabetas 423,704.

El crecimiento de la población de Honduras tomando como términos para la comparación los registros, cálculos y censos practicados desde 1791 a 1910, ha sido el que se indica a continuación:

Períodos.	Habitantes.	Comparación.	Aumento por año. Disminución por año.
1791	93,501		
1801 a 1826	130,000	[1] 36,499	[1] 3,649.9
1826 a 1850	200,000	[1] 70,000	[1] 2,800.0
1850 a 1881	350,000	[1] 150,000	[1] 6,250.0
1881 a 1887	307,289	[2] 42,711	[2] 1,377.7
1887 a 1895	381,938	[1] 74,649	[1] 12,441.5
1895 a 1901	398,877	[1] 16,939	[1] 2,117.3
1901 a 1905	489,367	[1] 90,490	[1] 15,081.6
1905 a 1910	500,135	[1] 10,768	[1] 2,692.0
1910	558,857	[1] 58,722	[1] 11,744.4

[1] Aumento. [2] Disminución.

Los datos que anteceden los hemos recogido de los antecedentes que vamos a enumerar.

La población de 1791 es el resumen general de diocesanos que resultó en la visita pastoral que realizó de 1789 a 1791, a los pueblos de su diócesis, el Obispo de Comayagua, Iltmo. señor don Fray Fernando de Cadiñanos, según consta en el informe que elevó al Rey en el último de los años citados.

La de 1801 es el resumen de un cuadro formado por el Gobernador Intendente y Comandante general de la provincia de Honduras, coronel don Ramón de Anguiano, el 1º de mayo del mismo año, cuadro en el cual constan, especificadas, las subdelegaciones, tenencias y parroquias en que estaba dividida esta provincia, con las ciudades, villas, reducciones y pueblos de indios existentes en aquella fecha.

La población de 1826 se basa en el cálculo hecho por el señor don Dionisio de Herrera, jefe que fué del estado de Honduras; lo mismo que la de 1850 que descansa en el cálculo hecho por Mr. E. Geo. Squier.

Ya desde 1881 puede tenerse más confianza en las cifras de la población hondureña, pues son resumen de los censos levantados por la Dirección de Estadística en los años señalados en el cuadro que antecede. Sin embargo precisa tener presente, para no darles sino un valor relativo, primero, la

repugnancia de la población rural y mucho más de la indígena para hacerse empadronar, pues, en su ignorancia, creen que las formalidades del censo son precursoras de nuevos impuestos o de servicios que han de prestar; y, segundo, por que los Directores generales de Estadística, con muy contadas y honrosas excepciones, tomando en consideración las deficiencias del empadronamiento, aumentan las cifras de éste con un tanto por ciento más caprichoso que convencional.

El Director general de Estadística de 1881, que lo era don Francisco Cruz, hizo labor muy apreciable, más tal vez que ningún otro, por ser la primera vez que se levantó un censo general en Honduras; mas suplió con datos dignos de ser tenidos en cuenta; pero que no eran resultado de un empadronamiento directo, las faltas de empadronamiento de no pocos pueblos.

El señor Lic. don Antonio R. Vallejo que levantó el censo de 1887, muy superior éste al de 1881, dice, que, por estimarlo deficiente, "se creyó autorizado para calcular en un 6, 10, 15, 20 y hasta 50 por ciento los defectos aludidos, especialmente en las poblaciones indígenas que se escondieron el día del empadronamiento."

El Director de Estadística, don Alfredo Quiñones, que levantó el censo de 1901, aumentó a las cifras de éste un 10 por ciento, cosa que no hizo el también Director General, don Teófilo Canales, al levantar el de 1910.

Las cifras que damos en el cuadro que antecede no tienen estos aumentos. El señor Director general de Estadística, doctor don Miguel A. Navarro, prepara en la actualidad los trabajos conducentes a llevar a cabo un nuevo empadronamiento en este año de 1915. De esperar es que más acostumbrada ya la gente a las operaciones del censo y conociéndose también en lo que estriban sus deficiencias, puedan éstas ser evitadas o a lo menos corregidas eficazmente.

Por lo que hace al censo político, el número de electores es en Honduras de 116,271; de ellos son elegibles 57,502; son solteros 66,664, casados 44,747, y viudos 4,860. Saben leer 43,936, y no saben leer 72,335.

Respecto al movimiento de la población podemos consignar las cifras siguientes, que son resúmenes del año de 1912, último del que nos ha sido dado adquirirlas.

Nacimientos: de ladinos, legítimos, hombres, 4,134, mujeres, 3,592; naturales, hombres, 5,122, mujeres, 4,778; de indios, legítimos, hombres, 976, mujeres, 806; naturales, hombres, 1,312, mujeres, 1,265. Total de nacimientos: de hombres, 11,544, de mujeres, 10,441. En total, 21,985, natalidad absoluta. Relativa 38 por ciento.

Tomando como términos de comparación 17 naciones: Alemania, Argentina, Bélgica, Chile, Dinamarca, España, Francia, Gran Bretaña, Holanda, Honduras, Hungría, Noruega, Rumanía, Servia, Suiza, y Uruguay, de las que la mayor natalidad corresponde a Rumanía, con 39.8 por ciento y la menor a Francia, con 19.7, Honduras ocupa el tercer lugar en la escala, con 38 por ciento.

La mortalidad ofrece las siguientes cifras: total de fallecidos, 9,830; hombres, 5,121; mujeres, 4,709.

Por razas: ladinos, hombres, 4,169, mujeres, 3,748; indios, hombres, 952, mujeres, 961.

Por el estado civil: solteros, hombres, 4,019, mujeres, 3,559; casados, hombres, 771, mujeres, 617; viudos, hombres, 331, mujeres, 533.

Según la nacionalidad las defunciones se resumen así: hondureños fallecidos, hombres, 5,029, mujeres, 4,648; extranjeros, hombres, 92, mujeres, 61.

Según la religión: católicos, hombres, 5,077, mujeres, 4,667; de otras creencias, hombres, 44, mujeres, 42.

Por la edad: menores de 5 años, 4,141; mayores de 5 años, 5,689. De éstos de 90 a 100 años, 86; de más de 100 años, 11.

Mortalidad absoluta, 9,830; relativa, 17 por ciento.

Refiriéndonos ahora a la comparación entre 17 naciones: Alemania, Argentina, Bélgica, Chile, Dinamarca, España, Francia, Gran Bretaña, Holanda, Honduras, Hungría, Italia, Japón, Noruega, Rumanía, Servia y Suecia, de las que la mortalidad comparada está representada por 32 por ciento en Chile y por 12 por ciento en Dinamarca, Honduras ocupa el onceno lugar con 17 por ciento.

Las causas de la mortalidad dan las cifras que siguen:

Enfermedades generales, defunciones	1,266
Enfermedades del sistema nervioso, defunciones	175
Enfermedades del aparato circulatorio, defunciones	101
Enfermedades del aparato respiratorio, defunciones	728
Enfermedades del aparato digestivo, defunciones	1,052
Enfermedades del aparato genito-urinario y sus anexos, defunciones	44
Estado puerperal, defunciones	181
Enfermedades de la piel y tejido celular, defunciones	226
Primera infancia, defunciones	207
Vejez, defunciones	97
Afecciones producidas por causas exteriores, defunciones	346
Enfermedades mal definidas, defunciones	5,354
Total de defunciones	9,830

Los matrimonios celebrados en Honduras en el año expresado fueron 2,455, de los cuales fueron de soltero con soltera 2,341; de soltero con viuda 13; de viudos con solteras 97; de viudo con viuda 4. Los matrimonios de ladinos fueron 2,002 y los de indios 453.

Se celebraron matrimonios de hondureña con hondureño 2,362; de hondureño con extranjera 6; de extranjero con hondureña 36 y de extranjero con extranjera 51.

Hubo matrimonios de varones de menos de 15 años 2 y 124 de mujeres de la misma edad, 20 de hombres mayores de 60 años y 2 de mujeres de la misma edad.

De los contrayentes sabían firmar 1,195 hombres y 931 mujeres, y no sabían firmar 1,260 hombres y 1,524 mujeres.

La nupcialidad relativa fué de 4.24 por ciento.

En la comparación entre 22 naciones: Alemania, Austria, Belgica, Bulgaria, Chile, Dinamarca, España, Francia, Gran Bretaña, Holanda, Honduras, Hungría, Italia, Japón, Noruega, Portugal, Rumanía, Rusia, Servia, Suecia, Suiza y Uruguay, Honduras ocupa el último lugar, con sus 4.24 por ciento, siendo la primera la Gran Bretaña con 14.3 por ciento y precediendo Chile a Honduras con 5.8 por ciento.

Transmigración.—Para determinar el número de Hondureños que se expatrían, el de los mismos que regresan al país y de los extranjeros que vienen a residir a él, hemos podido tener a la vista muy pocos documentos y además muy imperfectos, ya que en Honduras no hay pasaportes ni para entrar ni para salir de la República. Sin embargo podemos asegurar que en 1912 entraron en el país 9,578 individuos y salieron 9,268; hubo un beneficio para la población de 310 personas.

Producciones.—De todas las fuentes de riqueza de Honduras, la agricultura debía ser la más productiva, más por desgracia esta industria no ha progresado en las proporciones que en otros países, aun en Centro América, que están menos favorecidos por la naturaleza que esta República. Pueden señalarse a ella zonas distintas, de diferente situación, amplitud y altura, y en ella regiones agrícolas muy diversas.

Estas diferencias importantes, especialmente de las que proceden de la exposición al sol y de la declividad hacia los mares que bañan las costas hondureñas, y, también, la dirección de las cadenas de montañas, que defienden a las tierras más aptas para la agricultura de los vientos del Norte y del Sur, permiten cultivar una superficie de millones de hectáreas, en la que pueden vivir, desarrollarse y dar frutos abundantes numerosas especies de vegetales de todos los climas. Fuera del maíz, el frijol, la patata, la caña y otros productos que se hallan aquí en su región natural, se da muy bien el trigo y también los árboles frutales de las zonas templadas y aun frías, junto con el café, el cacao, el algodón, el arroz y multitud de otros vegetales de las zonas más diferentes y opuestas.

Las estadísticas relativas al volumen de los cultivos son sobremanera deficientes. Podemos, sin embargo, señalar las siguientes cifras respecto al monto de las cosechas obtenidas en el año ya mencionado, de algunos productos agrícolas.

Maíz:	
Hectolitros	190, 079
Fanegas	307, 730
Frijoles:	
Hectolitros	26, 224
Fanegas	47, 252
Maicillo:	
Hectolitros	8, 368
Fanegas	15, 078
Arroz:	
Kilogramos	536, 361
Quintales	11, 658
Trigo:	
Kilogramos	3, 282, 010
Quintales	93, 071
Café:	
Kilogramos	8, 275, 596
Quintales	179, 873
Cacao:	
Kilogramos	7, 407
Quintales	161
Patatas:	
Kilogramos	112, 121
Quintales	2, 437
Tabaco:	
Quintales	1, 036, 192
Kilogramos	22, 522
Añil:	
Kilogramos	2, 898
Quintales	63
Zarzaparilla:	
Kilogramos	506
Quintales	11
Bananos, racimos	8, 387, 548
Cocos	8, 246, 306

No queremos entrar a discutir de manera seria las cifras que anteceden, pues, aun cuando de procedencia oficial, hemos de hacer notar lo defectuoso que es el servicio de estadística hasta ahora, que por otra parte no cuenta con empleados especialmente instruídos en los departamentos, pesando toda la carga sobre los gobernadores políticos, faltos hasta de personal suficiente para sus numerosas e ingentes tareas. Lo que sí hemos de consignar con entero fundamento es, que el país tiene una capacidad productora infinitamente mayor de la que aparece por las cifras copiadas, pues sólo una parte muy pequeña del territorio se cultiva, y por lo que hace a cereales, únicamente se tiene en mira en su cultivo satisfacer las propias necesidades y, a lo más, la del pueblo o población cercana. De aquí que pudiendo ser Honduras, granero de todo Centro América, apenas un año las cosechas no son abundantes o tempranas, se sienten los efectos de la escasez. Cuando se haya dado un impulso verdadero al cultivo de granos por métodos racionales y modernos; cuando la creación de prados artificiales para forraje (los llamados potreros) sea un hecho, habrá verdadera agricultura en Honduras y el excedente del producto de sus ricas tierras, dará materia abundante para una explotación remuneradora, suprimiendo a la vez los repetidos conflictos actuales de la escasez.

El maíz puede cultivarse y se cultiva en todo el territorio. El trigo en una parte de él, especialmente en las alturas, como sucede en los departamentos de Ocotepeque y El Paraíso. El cultivo del arroz que se produce de muy buena calidad se hace en varios pueblos de Intibucá, como Concepción, Camasca, Jesús de Otoro, etc.; en Mercedes y La Encarnación y otros pueblos del departamento de Ocotepeque, en el de El Paraíso, Tegucigalpa y otros. El café se da muy bien en El Paraíso, Santa Bárbara, Yoro y otros departamentos. En los del Sur, el cacao; y en una palabra, muy pocas son las localidades y terrenos de la República, como podrá verse en el curso de esta noticia, en donde no pueda establecerse, con resultados halagadores, una explotación agrícola.

Bosques.—La extensión de los bosques en la República es inmensa, no obstante los cortes y descombramientos realizados, especialmente en los últimos 30 años. Todos los departamentos hondureños tienen bosques en mayor o menor extensión; pero se distingue principalmente por su riqueza de madera de ebanistería y su abundancia de pinos (ocote) el departamento de Colón, en la comarca de la Mosquitia; los de Atlántida y Cortés en el Norte, los de Olancho y Yoro en el Centro, así como el de Tegucigalpa y los de Choluteca y Valle en el Sur; pero, repetimos, que todos los departamentos hondureños tienen profusión de maderas útiles y de lujo.

Los bosques se dividen en tres clases: los del Estado, que comprenden también los que se encuentran en las costas, en los terrenos reservados a la nación; los que forman parte de los ejidos municipales y, por último, los que constituyen propiedades particulares.

Haciendo abstracción de los bosques que, por su situación, la ley prohibe su tala, así como los que están reservados para su explotación por las comunidades, los demás pueden ser explotados, conforme a la ley, mediante contratas con el Gobierno.

Ganadería.—La República tiene inmensas extensiones de terreno aptas para la crianza de ganado, la que constituye una de las principales riquezas del país. Sin embargo, limitándose los ganaderos con muy contadas excepciones, a utilizar los pastos naturales, el ganado, si bien abundante, degenera mucho, siendo de notar que las reses de Honduras pequeñas de tamaño por lo general; pero libres de epizootias y otras enfermedades, crecen y se desarrollan admirablemente al ser trasladadas a dehesas acotadas y con pastos artificiales.

El ganado constituye un ramo importante de exportación a las Repúblicas vecinas y a la colonia inglesa de Belice. Durante largos años se exportaba a Cuba principalmente. En el año citado de 1912 fueron exportadas 19,017 cabezas de ganado vacuno. El consumo interior fué de 57,186 reses vacunas, 87 lanares y 24,794 porcinas; en total, 82,067.

En el país hay 762 ganaderos matriculados. El número de haciendas es de 1,560, con 441,344 reses vacunas, 71,912 caballares, 5,474 asnales, 17,789 mulares, 23,699 cabrías, 3,260 lanares y 143,643 porcinas. En total, 707,121.

Aves de corral no podemos señalar su número, y aun el de ganados que queda expreso, lo juzgamos muy inferior a la realidad. En el departamento de Olancho han sido contadas 71,975 aves de corral. Es éste el departamento en que más ganado existe en la República.

El terreno dedicado a la ganadería abarca 49,392 hectáreas y 64 áreas; de ellas son de pasto natural 29,392 hectáreas, 27 áreas y de pasto artificial 28,263 hectáreas, 37 áreas.

Minas.—La riqueza mineral de Honduras tan celebrada en tiempos del Gobierno español y, que según los escritores de aquella época, tanto excitaba la codicia de los extranjeros, siendo causa principal de los ataques repetidos que sufrían las flotas que conducían a España metales preciosos, por parte de los

corsarios ingleses principalmente; franceses y holandeses en las postrimerías de dicho régimen, en los comienzos del siglo último, no se hacía notar apenas, y todavía durante más de la mitad del mismo siglo, sino por pequeñas explotaciones particulares, que no eran ni sombra de las que existieron anteriormente.

Sin embargo, desde 1881 las explotaciones de las minas han ido en aumento, si no tanto como era de esperar, debido a causas que no son para tratadas en este sitio, a lo menos lo suficiente para acreditar la riqueza minera de Honduras, y para que convencidos de ella, empresarios y mineros, y también de las causas que han ocasionado no pocos fracasos, se dediquen a su examen previo y a su laboreo, satisfechos de él, evitando los escollos en que han tropezado mucho antes de ahora, y que no han sido otros que ambiciones insensatas y manejos criminales para explotar en el exterior a los capitalistas empresarios y para apoderarse en el interior, en perjuicio de aquéllos, de minas valiosas, que faltos de capital después no han podido explotar, por su propia cuenta, los desleales administradores.

Pero el tiempo hace que se restablezcan las cosas a su estado normal a que él y las decepciones conducen, y que Honduras adquiera de nuevo gran crédito como país mineral. Los departamentos en que esta rama de la riqueza nacional tienen mayor importancia son los de Tegucigalpa, para la plata, el plomo, el hierro y el cobre, creyéndose existe también carbón de piedra, por las muestras que se encuentran en diversos lugares de su jurisdicción. También hay oro en el mineral de San Juancito y otros lugares. Para este metal hemos de estar en Olancho, con sus ríos que, como hemos dicho, arrastran arenas auríferas abundantes; y el departamento de Colón en la zona denominada El Dorado, en La Mosquitia. En el de El Paraíso, en Danlí, hay también ricos yacimientos auríferos; y valiosas minas de plata y aun de oro, en Yuscarán. También de este último metal en el departamento de Valle; y, en una palabra, rarísimo es, no digamos el departamento, sino el lugar de la República en que no se encuentran minerales explotables, que lo serán ciertamente tan luego como las vías de comunicación faciliten el transporte rápido y barato, al mismo tiempo que reconocimientos científicos señalen definitivamente los yacimientos minerales existentes.

En los departamentos occidentales de la República se encuentran piedras preciosas, tales como el opalo de cuatro o más variedades; el berilo y el corindon, con sus variedades; amatista, esmeralda, rubí, topacio, zafiro, etc., y la turquesa. Diamantes no han sido hallados hasta ahora; pero dada la naturaleza de los terrenos y la existencia en ellos de las piedras indicadas no sería extraño que también los hubiera.

Lo que hoy llama más la atención es la probable existencia de yacimientos petrolíferos muy extendidos, que de confirmarse su valor industrial, cambriarían por completo la situación y aun el aspecto del país.

Otros minerales de gran importancia industrial existen en Honduras, a más de los mencionados, y sales minerales útiles. Entre unos y otras el azufre, el platino, el estaño, el zinc, la sal gemma, el alumbre, el salitre; diversos silicatos: amianto, mica o talco, etc.

Piedras: cuarzo hialino y litoideo; jaspes de colores diferentes, mármol, pizarra, piedras de cal, tisa, yeso fibroso, granito, etc.

Respecto del valor siquiera aproximado, de la exportación de minerales, contra nuestro deseo hemos de omitirlo por falta de datos oficiales; pero los muy deficientes que poseemos nos autorizan para fijar en de 250,000 a 300,000 dólares, el valor de la producción de oro de los lavaderos de Olancho, en los que no existen propiamente empresas organizadas regularmente, fuera de una de un ciudadano de los Estados Unidos, que dicen produce

como 2,000 onzas de oro al año (32,000 dólares), pero esta cifra la juzgamos enteramente caprichosa.

De la memoria de Fomento presentada al Congreso Nacional en sus sesiones de este año, extractamos los siguientes datos, relacionados con el mineral de San Juancito, en el departamento de Tegucigalpa, explotado por la New York and Honduras Rosario Mining Co., la compañía más poderosa establecida hasta ahora en el país, y la que también mejor ha sabido organizar sus trabajos, que realiza en grande escala.

Esta compañía ha renovado últimamente toda su maquinaria, con un costo de $138,093.66. Durante el año benefició 65,403.82 toneladas de broza, las que dieron 1,422,000 onzas de plata y 9,500 de oro. El valor efectivo de tal producción se calculó en $901,000, oro americano. Para formarse una idea de la magnitud de esta empresa, bastaría decir que la longitud total de los túneles abiertos en la mina es de casi 100 kilómetros (20 leguas). "Se han empleado en los trabajos 132 toneladas de dinamita, 1,950,198 pies de guía (mecha), 373,800 fulminantes, 74,000 libras de candelas y 3,542 barras de acero de 8 pies de largo cada una."

Durante el año anterior se otorgaron 21 concesiones de zonas mineras; percibiendo el Estado durante el mismo lapso, en concepto de derechos de patente, pertenencias y sitios para planteles, $34,538.88.

Resumiento: de los datos expuestos muy a la ligera, resulta evidente que Honduras es un país esencialmente minero y en tal concepto de un gran porvenir. Si todavía este país no ocupa un lugar ventajoso entre los proveedores de metales preciosos y de minerales industriales del mundo, se debe en gran parte a causas de que no debemos ocuparnos aquí; pero que radican en el mal manejo de las empresas que en lo general se han establecido en la República y a la falta de buena fe de sus administradores, que con excepción de los de la compañía minera de San Juancito y de otras muy contadas, han tendido siempre a hacer fracasar las empresas, en propio beneficio, paralizándolas por completo, por no haber podido realizar las cuentas galanas con que se habían forjado ilusiones. Sólo así se explica que distritos mineros tan ricos y conocidos como el de Yuscarán, donde se hallan las célebres minas de Guayabillas, Monserrat, el Roble y otras, se encuentren sumidos en la actualidad, en la más completa paralización. El porvenir se presenta, sin embargo, propicio para el desarrollo de la industria minera en Honduras, muy especialmente si los que podríamos llamar acaparadores de minas y de concesiones mineras, se convencen del daño que ocasionan al país con su conducta, sin provecho alguno para ellos tampoco. El carbón de piedra, el petroleo, el hierro esixten en abundancia en el país.

Aguas minerales.—El territorio de Honduras es muy rico en aguas minerales y ciertamente ocuparía lugar distinguido entre los países que las poseen, si se diese algún impulso a la explotación de esas fuentes de vida y de riqueza, como se hace especialmente en Europa, con las llamadas estaciones balnearias, de muchas de las cuales sus aguas no reunen ciertamente las muy estimables propiedades que las de las fuentes hondureñas. Podemos citar el hecho de una fuente termal, existente apenas a de cuatro o cinco kilómetros de la capital, de aguas sulfo-carbonatadas y de virtudes medicinales comprobadas para el reumatismo y otras muchas enfermedades, la cual fuente ha sido abandonada por su propietario, hasta el punto de haberse soterrado el manantial.

Un estudio detenido de las diversas fuentes y el análisis de sus aguas conducirían necesariamente a la estimación de ellas y a que en Honduras, donde hay climas bellísimos y panoramas encantadores, con la debida labor y propaganda conveniente, se crearan estaciones balnearias que no sería difícil poner de

moda para el turismo extranjero, especialmente en las estaciones rigurosas, tanto de frío como de calor.

Industria de la pesca.—Esta industria no presenta hasta ahora un aspecto halagador, ni menos contribuye ni en poco ni en mucho al abastecimiento de mercados extranjeros. Sin embargo, basta para el consumo de las costas, no pudiendo venderse sus productos en el interior por falta de vías de comunicación expeditas y rápidas. En la costa Norte se pescan tortugas, entre ellas el carey, y también esponjas, de buen tamaño y calidad, particularmente en las islas de Guanaja y Utila.

En el Sur hay mucha cantidad de ostras, también tortugas y aseguran que pueden obtenerse perlas de algún valor.

Industrial fabril.—La industria obrera hondureña está muy lejos de poder entrar en concurrencia con la de las demás naciones; pero aun tan limitada, y más hace algunos años, se desarrolla todos los días y toma sucesiva y constantemente extensión. El Gobierno apreciando bien que el progreso material y económico depende en gran parte del desarrollo de sus industrias, no deja de favorecerlas con concesiones y franquicias. Según datos oficiales correspondientes al año anterior había en el país 106 fábricas en actividad; 34 de aguardiente, 3 de jabón; éstas han aumentado recientemente; 4 de jabón y velas, 2 de cerveza, 11 de agua gaseosas, 2 de calzado, 4 de sombreros de junco, 16 de puros, 2 de harina de trigo, una de azúcar, 6 de aserrar maderas, 3 tenerías, 10 fábricas de hielo, 3 de ladrillos de cemento, 1 de trabajar en mármol, 1 nevería, 1 de sellos de hule y 1 de vino de naranjas.

A esta relación debemos agregar: una fábrica de confites, "La Colmena," en Tegucigalpa; una fábrica de brevas, cigarrillos, y puros al sistema cubano, también en esta capital, "La Carmela," una fábrica de perfumes y algunas otras que se hallan ya en explotación o próximas a quedar instaladas.

Comercio.—Pocos años hace desde que viene publicándose el resultado oficial de la balanza comercial y durante período tan corto ha podido observarse que el comercio exterior de Honduras ha aumentado considerablemente. A pesar de esta marcha rápida, debida a influencias de causas especiales, al mismo tiempo que al desarrollo del comercio en el mundo entero, el comercio hondureño ocupa un lugar todavía muy inferior entre las naciones con las cuales puede comparársele, por su población y extensión territorial.

Un detalle del comercio tanto de exportación como de importación figura más adelante, en los cuadros respectivos. Resumimos ahora las cifras principales correspondientes a uno y otro, durante el año repetidamente mencionado.

La exportación fué en total por $7,952,420.73.

De ella corresponden a productos animales $925,282.83, figurando en primera línea el ganado vacuno macho, por $497,863.50 y los cueros de res por $359,840.18.

Los productos vegetales sumaron $4,795,468.56; de ellos los bananos por $3,986,090.97, los cocos por $451,457.98 y el caucho por $85,856.16. Es halagador que el café alcanzara en la exportación un valor de $146,420.05, pues esta cifra, pequeña y todo como es, representa un impulso reciente y vigoroso en un cultivo que puede y debe ser, en Honduras, de gran porvenir.

Los productos minerales exportados ascendieron a $2,213,707.57 así:

Broza mineral, sin calificar	$15, 524. 57
Oro en bruto	70, 065. 00
Oro y plata en bruto	862, 949. 13
Oro y plata en cianuro	1, 162, 561. 37
Plata en bruto	$32, 988. 00
Plata acuñada	69, 619. 50
	2, 213, 707. 57

Otros artículos comprendidos en las estadísticas oficiales bajo el epígrafe de *diversos*, sumaron $17,962.27.

Los países de destino de la exportación y el valor de éstas, fueron:

Alemania	$424, 366. 78	Inglaterra	$32, 450. 00
C. de Belice	108, 045. 14	Jamaica	900. 00
Costa Rica	1, 250. 00	Méjico	10, 265. 00
Colombia	400. 00	Nicaragua	20, 637. 00
Cuba	3, 780. 00	Panamá	1, 805. 00
Chile	50. 00	Perú	28, 990. 00
Estados Unidos	6, 913, 706. 06	El Salvador	126, 742. 00
Francia	12, 519. 65		
Guatemala	266, 185. 00	Total	7, 952, 420. 73
Italia	329. 10		

La importación en el mismo año representó un valor de pesos oro 5,132,678.74. Esta suma se distribuye así, con respecto a los países de procedencia.

Alemania	$558, 327. 24	Francia	$148, 280. 32
Austria-Hungría	91, 500. 00	Guatemala	60, 577. 65
Bélgica	12, 417. 72	Holanda	242. 71
Costa Rica	205. 00	Inglaterra y sus colonias	751, 651. 64
Cuba	1, 082. 47	Italia	32, 842. 16
China	1, 634. 49	Japón	11, 800. 42
Dinamarca	1, 150.00	Méjico	5, 639. 37
España	45, 857. 18	Nicaragua	33, 282. 00
Estados Unidos	3, 463, 662. 07	Panamá	180. 00
El Salvador	3, 714. 80	Portugal	40. 00

Cabotaje.—El comercio de cabotaje en las costas del Norte ha adquirido bastante amplitud. Deploramos no tener datos efectivos que poder presentar respecto de él, ni respecto al volumen de ese comercio ni tampoco con relación al valor total del mismo.

Transporte interior.—Tampoco respecto de éste podemos consignar los datos que habríamos deseado, respecto al número y clase de vehículos, animales, etc. Por lo general el tráfico interior se verifica a lomo de mula. En la carretera del Sur o sea la que corre del puerto interior de San Lorenzo a la capital, abundan las carretas y otros vehículos, incluso automóviles de carga y para pasaje. Respecto a carretas lo mismo ocurre con las demás vías apropiadas existentes en el país; pero por lo general, repetimos, el tráfico se verifica a lomo de mula, pues los caminos en su mayoría, sendas estrechas y aun verdaderas veredas, no consienten el paso de vehículos por angostos que éstos sean. La mula hondureña es de poca alzada; pero fuerte y segura; carga 115 kilogramos (10 arrobas) generalmente y hace jornadas de 25½ kilómetros (6 leguas), término medio.

Navegación Interior.—Al ocuparnos en la descripción de los ríos que corren por el territorio hondureño, hemos indicado que son o pueden ser navegables, siendo los principales el Motagua, el Ulúa, El Chamalecón, El Aguán, El Negro, El Patuca y el Segovia, en el Norte, y en el Sur el Choluteca, el Nacaome y el Goascorán.

Se siente en la actualidad la necesidad y la utilidad de la navegación por los ríos, lagos y canales, a causa de que es un hecho reconocido que el transporte por agua es el más económico y el más racional también.

Ejército.—Los datos que insertamos a continuación son los que corresponden al resultado de la inscripción general realizada en el mes de enero de 1913,

última que ha sido publicada, respecto de la que, según opinión oficial, la cifra a que asciende en aquélla el total de las milicias de la República es bastante inferior a la realidad. El total inscrito fué: de primera categoría, 35,706; de segunda categoría, 19,578; total, 55,284.

Fueron declarados exentos del servicio militar 4,941 individuos, de un total de 60,225 alistados para el servicio activo de campaña.

Esa fuerza está organizada en 108 batallones y 3 compañías sueltas.

En la capital existe en virtud de decreto especial del Congres, el Batallón de Veteranos, organización modelo, en la que sus individuos, adquieren no sólo instrucción militar, sino que es núcleo con el cual puede reorganizarse el ejército, sobre bases de subordinación y disciplina estrictas.

Los domingos primeros de cada mes se verifican paradas o sean listas dominicales que han reemplazado a los antiguos ejercicios doctrinales. El término medio de asistencia durante el año anterior fué de 717 jefes, 2,789 oficiales, y 45,422 individuos de tropa.

Marina.—Honduras no posee marina militar propiamente dicha. En la costa Norte tiene en servicio actual un pequeño crucero de vapor denominado *General Barahona*, que vigila el contrabando y desempeña las comisiones que se le encargan, recorriendo periódicamente toda la costa. Tanto en aquélla como en la del Sur, tiene el Gobierno varios vapores pequeños de gasolina, los que ocupa en el servicio de los puertos.

Hacienda.—El prespuesto general de ingresos para el año económico corriente, asciende a $6,749,008.60 plata, o sean dólares, al 150 por ciento de prima, $2,699,603.44; a este total hay que agregar el 5 por ciento adicional cobrable en oro sobre la importación de mercancías en la República, las que se calculan en $2,500,000, que asciende en dólares a $125,000, o sean en total $2,824,603.44 oro.

Los principales ingresos son en los conceptos siguientes:

	Plata.	Oro.
Renta Aduanera:		
Importación	$2, 500, 000. 00	$1, 000, 000. 00
Exportación	220, 000. 00	88, 000. 00
	2, 720, 000. 00	1, 088, 000. 00
Renta de Aguardiente	1, 981, 867. 27	792, 746. 90
Producto del Ferrocarril Nacional	599, 000. 00	239, 600. 00
Impuesto de caminos	350, 000. 00	140, 000. 00

El presupuesto de gastos está calculado en las cifras del de ingresos, distribuyendo aquéllos, por ramos, en la forma siguiente:

	Plata.	Oro.
De Gobernación	$718, 065. 75	$287, 226. 30
De Justicia	186, 867. 40	74, 746. 96
De Relaciones Exteriores	214, 508. 50	85, 803. 40
De Instrucción Pública	562, 551. 00	224, 980. 40
De Fomento, Obras Públicas y Agricultura	1, 815, 250. 00	726, 100. 00
De Guerra y Marina	1, 892, 589. 60	757, 035. 84
De Hacienda	1, 003, 916. 60	401, 566. 64
De Crédito Público	355, 359. 75	142, 143. 90
Total	6, 749, 008. 60	2, 699, 603. 44

A esta suma total de los gastos hay que agregar la de oro, $125,000, producto del 5 por ciento adicional sobre los derechos de importación ya mencionados y que se destinan a la cancelación de saldos de cuentas con agentes corresponsales.

El tanto por ciento que corresponde a los gastos por ramos, en relación al total del presupuesto, es como sigue:

	Por ciento.		Por ciento.
Ramo de Gobernación	10. 63	Ramo de Guerra y Marina	28. 09
Ramo de Justicia	2. 76	Ramo de Hacienda	14. 87
Ramo de Relaciones Exteriores	3. 17	Ramo de Crédito Público	5, 26
Ramo de Instrucción Pública	8. 33		
Ramo de Fomento, Obras Públicas y Agricultura	26. 89		100. 00

Guerra ocupa por desgracia, el primer puesto; con 28.09 por ciento, pero consuela ver que le sigue el Ramo de Fomento, con 26.89 por ciento, en el que se comprenden carreteras y demás obras públicas y cuanto tiende al desarrollo del país.

Las rentas en el año a que venimos refiriéndonos de 1912 a 1913 dieron un total de $5,754,835.01, con un gasto de las mismas rentas de $547,602.91. Con relación al año anterior ofrecen los resultados siguientes:

	Producto bruto.	Gastos.	Producto neto.
1912-13	$5, 754, 835. 01	$547, 602. 91	$5, 207, 232. 10
1911-12	5, 182, 328. 25	554, 423. 00	4, 627, 905. 25
Diferencias	+572, 506. 76	−6, 820. 09	−579, 326. 85

Hubo, pues, un aumento total en los ingresos netos de $579,326.85 plata en 1912–13 sobre los habidos en 1911–12.

Las rentas han venido aumentado desde 1910–11 como se demuestra en los datos que siguen, respecto al decenio último:

Año.	Producto neto (plata).	Año.	Producto neto (plata).
1903-4	$3, 380, 253. 21	1906-7 [1]	$2, 828, 386. 70
1904-5	3, 304, 362. 26	1907-8	3, 450, 042. 09
1905-6	3, 535, 078. 13	1908-9	3, 408, 573. 73

[1] La baja de las rentas en este año fué debida a la guerra con Nicaragua y a la revolucion interior que trajo aparejada.

Año.	Producto neto (plata).	Año.	Producto neto (plata).
1909-10	$3, 666, 900. 24	1911-12	$4, 627, 905. 25
1910-11	3, 981, 636. 44	1912-13	5, 207, 232. 10

Promedio anual de ingresos durante el decenio, plata $3,739,937.15.

Aumento en el período señalado:

En 1910 respecto de 1909	$258, 326. 51
En 1911 respecto de 1910	314, 736. 20
En 1912 respecto de 1911	646, 268. 81
En 1913 respecto de 1912	579, 326. 85

El detalle de las rentas, especificadas éstas, fué como sigue:

Nombre de las rentas.	Producto bruto.	Gastos de las rentas.	Producto neto.
Rentas aduanera	$2,848,916.93	$27,879.83	$2,821,037.10
Renta de aguardiente	1,937,289.22	481,369.50	1,455,919.63
Renta de licores	2,686.25	2,146.12	540.13
Renta de pólvora	38,352.61	3,975.45	34,377.16
Renta de puros	11,035.29	1,317.26	9,718.03
Papel sellado y timbres	145,534.07	8,314.99	137,219.08
Impuesto pecuario	106,722.00	5,418.34	100,303.66
Ramo de correos	59,750.35	3,544.79	56,205.56
Telégrafos	109,137.92	6,264.04	102,873.88
Cablegramas	56,891.76	....	56,891.76
Papel de aduanas	61,298.30	3,397.39	57,900.91
Exportación de ganado	21,366.46	....	21,366.46
Muelle	86,208.97	739.58	85,469.39
Producto de tierras	676.09	....	676.09
Imprenta Nacional	9,289.53	....	9,289.53
Encuadernación	653.81	....	653.81
Litografía y fotograbado	123.00	....	123.00
Impresos	26,476.35	1,441.82	25,034.53
Escuela de Artes y Oficios	8,218.72	....	8,218.72
Montepío: 2 por ciento	7,559.88	....	7,559.88
Ingresos eventuales	216,667.50	793.71	215,873.79
Total	5,754,835.01	547,602.91	5,207,232.10

La comparación entre los ingresos presupuestos y los obtenidos de la siguientes cifras:

Rentas.	Presupuesto.	Ingresos.	Alza.	Baja.
Renta aduanera	$2,600,000.00	$2,821,037.10	$221,037.10	....
Renta de aguardiente	1,550,000.00	1,455,919.63	....	$94,080.27
Renta de licores	75,000.00	54,013	....	74,459.57
Renta de puros	....	9,718.03	9,718.03	....
Renta de pólvora	30,000.00	34,377.16	4,377.16	....
Papel sellado y timbres	225,000.00	137,219.08	....	87,780.92
Impuesto pecuario	90,000.00	100,303.66	10,303.66	....
Ramo de correos	50,000.00	56,205.56	6,205.56	....
Telégrafos	90,000.00	102,873.88	12,873.88	....
Cablegramas	35,000.00	56,891.76	21,891.76	....
Papel de aduanas	40,000.00	57,900.91	17,900.91	....
Exportación de ganado	50,000.00	21,366.46	....	28,633.54
Muelle	60,000.00	85,469.39	25,469.39	....
Producto de tierras	....	676.09	676.69	....
Imprenta Nacional	7,000.00	9,289.53	2,289.53	....
Encuadernación	700.00	653.81	....	46.19
Litografía	3,000.00	123.00	....	2,877.00
Escuela de Artes y Oficios	15,000.00	8,218.72	....	6,781.26
Montepío	6,500.00	7,539.88	1,039.88	....
Eventuales	384,638.00	215,873.79	....	168,764.21
Total presupuesto	5,315,838.00	....	....	....
Total obtenido	....	5,207,232.10	....	....
Alza	....	....	354,817.48	....
Baja	....	....	....	463,423.25
Déficit contra el presupuesto	....	108,605.90	108,605.90	....
Balance	5,315,838.00	5,315,838.00	463,423.38	463,423.25

Los gastos señalados por la Ley de presupuesto alcanzaron a la suma de $4,710,567.25 y los exigidos fueron por $4,446,490.37. Se gastaron $264,076.88 menos de la cantidad presupuesta.

Hecha la comparación entre los gastos presupuestos y lo realmente exigido por las necesidades del servicio resultan las cifras que siguen:

	Valor presupuesto.	Valor gastado.
Ramo de Gobernacion	$731,557.50	$838,344.17
Ramo de Justicia	183,984.00	174,203.10
Ramo de Relaciones Exteriores	241,400.00	115,077.62
Ramo de Instrucción Pública	526,396.00	383,068.24
Ramo de Fomento y Obras Públicas	690,470.00	717,957.19
Ramo de Guerra y Marina	1,871,969.25	1,798,849.49
Ramo de Hacienda	464,790.50	418,990.58
Total	4,710,567.25	4,446,490.39
Exceso del presupuesto sobre los gastos		264,076.88
Balance	4,710,567.25	4,710,567.25

La deuda pública interior sumaba al terminar el ejercicio anterior, en plata $4,924,169.96. De esta suma fueron amortizados $244,668.76.

Pero como fueron incorporados rezagos de años anteriores y otros créditos anteriores, así como el valor reconocido por pérdidas durante la revolución de 1911, por $811,758.27, en total $1,068,242.31; al terminar el ejercicio señalado la situación de la deuda interior era como sigue:

Saldo en 31 de julio de 1912	$4,924,169.96	
Valor incorporado	1,068,242.31	
		$5,992,412.27
Valor amortizado	230,975.79	
Valor cancelado por Hacienda Nacional	13,692.97	
		244,668.76
Deuda interior en 31 de julio de 1913		$5,747,743.51

Comunicaciones con el exterior.—Se verifican por los puertos de la costa Norte y Sur. De la primera los de mayor tráfico son los de Puerto Cortés y La Ceiba. A estos dos puertos y con escala en el intermedio de Tela, siempre que hay carga en o para él, arriban con escala fija tres líneas de vapores, que ponen dichos puertos en comunicación con los de Guatemala, la colonia inglesa de Belice y el puerto de Nueva Orleans, en los Estados Unidos, y también con el de Tampa. La United Fruit Co. toca en los dichos puertos con, a lo menos, nueve vapores mensuales, la E. Vaccaro Bros., con tres, y con dos la Thacker Bros. También, a temporadas, tocan vapores de la Atlantic Fruit y de otras compañías, incluso de Liverpool y Hamburgo directamente, en circunstancias normales, pues en la actualidad el tráfico directo con Europa está suspendido por la guerra continental. También en las mismas circunstancias arriban vapores mejicanos, mensualmente, que cargan ganado vivo.

A Trujillo llegan semanalmente vapores ganaderos que hacen el tráfico con la Habana y otras poblaciones de Cuba; también los vapores fruteros suelen tocar en este puerto para cargar cocos.

En Roatán, capital de las islas de la Bahía, tocan regularmente en la época de la cosecha de la fruta los vapores de la United Fruit Co., los de la Independent Steamer Suh. Co. y otros. En el resto del año el tráfico, que es reducido, se hace por medio de buques de vela.

En el Sur, en tiempos normales tocan en Amapala los vapores de la Pacific Mail Steamship Co., compañía americana, y los de la alemana Kosmos, los primeros dos veces al mes en dirección Norte y dos también para el Sur; y los segundos una sola vez para cada una de las dos direcciones.

Las comunicaciones con San Francisco y Panamá se verifican por Amapala, y de la capital de la República y los departamentos del Sur y del centro se prefiere también esta vía para las comunicaciones con los puertos americanos del Atlántico así como para con Europa, por su mayor economía y por que evita las molestias que representa el viaje por tierra del interior del país al puerto de embarque, que debe hacerse a lomo de mula, lo mismo para el pasaje que para la carga. Desde la capital, Tegucigalpa, al puerto interior de San Lorenzo, para Amapala, el tráfico puede hacerse y se hace en coches, automóviles y carretas. Es la vía más cómoda y más barata.

El pasaje en mula cuesta de 8 a 10 pesos plata cada animal (3.20 a 4 dólares) y la misma cantidad el mozo. Un coche de cuatro asientos, 100 pesos plata (40 dólares) y el asiento, con un pequeño equipaje de mano en automóvil, 25 pesos plata (10 dólares). Los gastos del camino son de cuenta del viajero.

Los departamentos del Norte de la República utilizan para sus comunicaciones con los Estados Unidos y Europa la vía de Puerto Cortés. También de los Estados Unidos prefieren ésta para venir a la capital, heciéndose el viaje del puerto a La Pimienta en el Ferrocarril Nacional, cuesta 5 pesos plata por persona (2 dólares) y desde allí a Tegucigalpa en mula: el costo de ésta es de 25 pesos plata cada una y lo mismo el mozo (10 dólares), siendo los gastos del camino, incluso alimentación de las bestias, de cuenta del pasajero.

Comunicaciones postales.—El servicio de correos está bien organizado y funciona con toda regularidad en Honduras, no obstante las dificultades de las comunicaciones interiores en el país.

Honduras figura entre los países adheridos a la Unión Postal Universal y ha celebrado convenciones para el cambio de paquetes postales con los Estados Unidos, Inglaterra, Francia y Alemania.

Para el exterior hay un correo semanal por vía de Puerto Cortés y dos semanales por Amapala por vía de Panamá, y otros dos para San Francisco de California.

En el año que nos ha venido ocupando circularon por el correo de Honduras 1,616,825 piezas postales. En el anterior el movimiento fué de 1,437,887, resultando un aumento para el año último de 178,937 piezas.

Las encomiendas ascendieron a 13,935, con aumento sobre el año anterior de 2,211, en el que fueron 11,724.

Los paquetes postales recibidos fueron 13,253, con peso de 66,696 kilos. Estos pagaron $32,714.84 por derechos de aduanas y $1,325.30 por el impuesto de 5 centavos oro por paquete, por flete, entrega, etc. Al exterior fueron enviados 214 paquetes con peso de 315 kilos. También en el servicio de paquetes hubo en el año un aumento de 1,709 con relación al anterior.

Certificados fueron 56,712, mientras que en el año precedente fueron sólo 39,190, resultando un aumento de 17,522 para el último año.

Se expidieron en el año 481 giros postales, con valor en plata de $25,726 y se recibieron 67 con valor de $2,952.84.

Los gastos del correo durante el año ascendieron a $146,293.07 plata.

Por la utilidad que puede reportar su conocimiento copiamos a continuación la tarifa de correos vigente en Honduras en la actualidad:

SERVICIO URBANO.

Cartas: Por cada 15 gramos o fracción	$0.02
Impresos: Por cada 50 gramos o fracción	.01
Papeles de negocios: Por cada 50 gramos o fracción	.02
Encomiendas: Por cada 450 gramos	.10

Tarjetas postales:	
Simples	$0.01
Dobles (con respuesta pagada)	.02

SERVICIO INTERIOR.

Cartas: Por cada 15 gramos o fracción	.06
Impresos: Por cada 50 gramos o fracción	.01
Papeles de negocios:	
De 1 hasta 250 gramos	.10
Por cada 50 gramos adicionales	.02
Muestras:	
De 1 hasta 100 gramos	.02
De más de 100 gramos por cada 50 gramos adicionales	.01
Encomiendas: Por cada 500 gramos o fracción	.25
Certificados:	
Sobre porte sin aviso de recibo	.10
Sobre porte con aviso de recibo	.15
Sobre porte con aviso telegráfico	.30
Tarjetas postales:	
Simples	.03
Dobles	.04

SERVICIO EXTERIOR.

Cartas:	
Por cada 20 gramos o fracción	.15
Por cada 20 gramos o fracción adicionales	.11
Impresos: Por cada 50 gramos o fracción	.03
Papeles de negocios:	
De 1 hasta 250 gramos	.15
De más de 250 gramos por cada 250 gramos adicionales	.03
Muestras:	
De 1 hasta 100 gramos	.06
De más de 100 gramos por cada 50 gramos adicionales	.03
Certificados:	
Sobre porte sin aviso de recibo	.10
Sobre porte con aviso de recibo	.15
Tarjetas postales:	
Simples	.05
Dobles	.10

Paquetes postales:

Hay servicio de paquestes postales directos con Estados Unidos, Inglaterra y Francia pero pueden enviarse por medio de Inglaterra y Francia para cualquier otro país.

Franqueo para Estados Unidos:	
Por un paquete que no exceda de 1 libra	.25
Por cada libra adicional o fracción	.25
Franqueo para Inglaterra:	
Por un paquete que no exceda de 1 kilo	.48
Por un paquete de más de 1 kilo sin exceder de 3	.72
Por un paquete de más de 3 kilos sin exceder de 5	.96
Franqueo para Francia: Por un paquete sin relación de peso	.60

Pesos (máximum): 5 kilos [illegible] uno.

Dimensiones (máximum): 75 por 10 centímetros.

Observaciones:—El peso y dimensiones no pueden exceder para los—
Impresos, 2,000 gramos.
Dimensiones: 75 por 10 centímetros.
Papeles de negocios: 2,000 gramos.
Dimensiones: 75 por 10 centímetros.
Encomiendas: 5,000 gramos.
Dimensiones: 75 por 10 centímetros.
Muestras: 250 gramos.
Dimensiones: 35 por 15 centímetros.

NOTA.—El franqueo para Centro América es conforme al servicio interior, expresado en esta tarifa.

Pesos y medidas.—El sistema métrico decimal es el adoptado por la ley en Honduras; pero en la práctica son las antiguas medidas españolas las que se usan. He aquí la equivalencia aproximada de estos pesos y medidas:

Medidas de longitud.

1 metro=1.19 varas.
39 pulgadas inglesas.
1 vara=0.835 milímetros.
1 yarda=0.914 milímetros.
1 kilómetro=1,196 varas 10 pulgadas.
1,094 yardas.
1 milla=1,852 metros.
1 legua=5,556 metros, la legua maritima; la terrestre 4,225 metros. En la carretera del Sur de Honduras se ha calculado la legua por 4 kilómetros.

Medidas de superficie.

1 metro cuadrado=1.43 varas cuadradas.
1. 19 yardas cuadradas.
1 vara cuadrada=0.698 de metro cuadrado.
1 yarda cuadrada=0.836 de metro cuadrado.
7 metros cuadrado=10 varas cuadradas próximamente.

Agrarias.

1 área=119.60 yardas cuadradas.
1 hectárea=2.47 acres.
1 acre=40.47 áreas.
1 milla cuadrada=259 hectáreas.
1 cuerda cuadrada=1,746 centiáreas (2,500 varas cuadradas).
1 manzana=69.87 áreas (10,000 varas cuadradas).
1 caballería=64 manzanas=45.13½ hectáreas (645,816 varas cuadradas).

Medidas de volumen.

1 metro cúbico= 1.71 varas cúbicas.
35. 31 pies cúbicos N. A.
1 vara cúbica=0.584 de metro cúbico.
1 yarda cúbica=0.764 de metro cúbico.
1 pie cúbico N. A.=28,320 centímetros cúbicos.
7 metros cúbicos=12 varas cúbicas próximamente.

Medidas de capacidad.

1 litro=0. 864 de cuartillo.
0. 908 de quart.
1 hectolitro igual a 1.30 fanegas.
1 cuartillo=1.15 litros.
1 fanega=0.555 de hectolitro.
1 bushel=0.352 de hectolitro.
5 hectolitros=9 fanegas aproximadamente.

Para liquidos.

1 litro=1.98 de pinta.
1.056 cuartos de galón.
1 centilitro=0.238 de onza líquida.
1 cuartillo=0.504 de litro.
1 galón=3.786 litros.
1 onza líquida=2.958 centilitros.
1 litro=2 cuartillos aproximadamente.

Medidas de peso.

1 gramo=0.55 de adarme.
1 kilogramo=15.43 granos (troy).
2.17 libras castellanas.
2.20 libras (avoirdupois).
1 adarme=1.79 gramos.
1 grano (troy)=64.8 miligramos.
1 libra (troy)=0.373 de kilogramo.
1 libra (avoirdupois)=0.453 de kilogramo.
6 kilogramos=13 libras castellanas.
46 kilogramos=1 quintal próximamente.

Monedas.

La unidad monetaria es en Honduras el peso de plata, con peso de 25 gramos y ley de 0.900 de fino.

Se divide el *peso* en 100 *centavos* y comúnmente en 8 *reales*, cada uno de los cuales tiene, pues, 12½ centavos.

Existe en la capital de la República una Casa Nacional de Moneda en la que se acuñan moneda de los tipos y valores siguientes:

De oro: Pieza de 20, 10, y 5 pesos y de 1 peso.
De plata: Pieza de 1 peso y de 50, 25, 10, y 5 centavos.
De cobre: Pieza de 1 y 2 centavos.

BIBLIOTECA Y ARCHIVO NACIONALES.

Estos dos establecimientos que existen en edificio propio en la capital de la República, fueron fundados por el Dr. don Marco A. Soto, Presidente de la República, en 27 de agosto de 1880, y reorganizados y establecidos en su actual edificio, por el Presidente, general don Manuel Bonilla, en 1° de marzo de 1906.

La Biblioteca está abierta al público todos los días útiles, tanto en el día como por la noche. En el año a que venimos refiriéndonos hubo un total de lectores concurrentes a ella de 7,812, de éstos 3,488 concurrieron durante el día y 4,324 por la noche. Las obras consultadas fueron 9,111.

En el Archivo Nacional se custodian todos los documentos existentes de la época colonial y los históricos y administrativos que corresponden al período de la Independencia, desde 1821 hasta la fecha. El Archivo es también público, para que puedan consultar los documentos que existen en él, quienes tengan necesidad de hacerlo.

LITOGRAFÍA NACIONAL Y TALLER DE FOTOGRABADO.

El Presidente, general don Luis Bográn, fundó este establecimiento en 1° de enero de 1890 y desde sus comienzos se distinguió por el mérito de sus trabajos, los mejores sin disputa de todo Centro América. El general don Manuel Bonilla lo dotó, en 1912, de edificio propio, aumentando el taller de litografía con uno espléndido de fotograbado. Ambos trabajan en la actualidad para el Gobierno y también para los particulares. En el año anterior se gastaron en este establecimiento $36,562.65.

TIPOGRAFÍA NACIONAL.

Sin perjuicio de los establecimientos particulares que existen en el país, aumentados bastante en los últimos años, el Gobierno sostiene una buena imprenta para hacer las impresiones oficiales, la cual presta muy buenos servicios, y es, por su material, organización y por la buena ejecución de sus trabajos, un establecimiento de primer orden.

Durante el año se editaron en él 5 periódicos, 3 revistas, 59 libros y folletos, 1,933 trabajos oficiales y 595 particulares, en un total de 5,689,955 ejemplares y con valor de $89,013.19 plata. El costo total del establecimiento fué en el año de $58,085.15, de los que corresponden $29,245.75 a sueldos de empleados y $28,839.40 a valor de materiales. Hubo una utilidad líquida de $30,928.04.

Anexo a la tipografía hay un taller de encuadernación para los trabajos públicos y de los particulares. En el año último hizo los siguientes trabajos:

Oficiales, empastados, 1,057; en rústica, 169,952; con valor en total de		$7,917.72
Particulares, empastados, 647; en rústica, 14,112; con valor en total de		653.81
		8,571.53
Gastos: Sueldos de empleados	$3,240.26	
Valor de materiales	1,531.65	
		4,771.91
Utilidad líquida		3,799.62

Como el mejor elogio que puede hacerse de este establecimiento tipográfico y de su anexo copiamos el párrafo que sigue de la Memoria de la Secretaría de Gobernación, presentada al Congreso Nacional en sus últimas sesiones. Dice así:

"La tipografía atiende con toda oportunidad, a los múltiples trabajos oficiales que por la oficina superior respectiva recibe diariamente de la capital y de toda la República; y también a los numerosos trabajos particulares. Cuenta con un personal competente, formado en el país. Su director, don Ramón Landa, ha establecido en él la mayor disciplina y el orden más exacto."

DEUDA EXTERIOR DE HONDURAS.

Para la construcción de un ferrocarril interoceánico por territorio hondureño, el Gobierno de la República acordó la emisión de un empréstito en el exterior,

en 1867, el que fué en efecto emitido en Londres. Con posterioridad los representantes del Gobierno en Londres y París emitieron otros, arrojando todos las cifras que siguen:

Londres: Empréstito al 5 por ciento de 1867, emisión	£90, 000
Londres: Empréstito al 10 por ciento de 1867, emisión	1, 000, 000
París: Empréstito al 6¾ por ciento de 1869, emisión	2, 490, 108
Londres: Empréstito al 10 por ciento de 1870, emisión	2, 500, 000
Total de las emisiones	6, 080, 108

Estas fueron las emisiones; pero no se ha puesto en claro aún cual fué la suma de los bonos vendidos y que están en circulación, fuera de los que se sabe fueron amortizados. Para averiguarlo el Gobierno hondureño tiene nombrada una comisión que se ocupa en la liquidación de los dichos empréstitos, cuya suma total efectiva representa ciertamente una infinitamente menor que la señalada de las emisiones y que la que reclaman los tenedores de bonos de los empréstitos repetidos.

El Gobierno de Honduras se encuentra en la mejor disposición para arreglar esa deuda, de la que en justicia y en verdad no es responsable sino en parte muy pequeña, en la que resulte legítima y justificada en debida forma.

EXTRANJEROS EN HONDURAS.

Los extranjeros gozan en Honduras de todos los derechos civiles de los hondureños (art. 12 de la Constitución).

Los extranjeros están obligados desde su llegada al territorio de la República, a respetar a las autoridades y a observar las leyes (art. 11 de la Constitución).

Pueden adquirir toda clase de bienes en el país; pero quedando sujetos, en cuanto a estos bienes, a todas las cargas ordinarias y a las extraordinarias de carácter general a que están obligados los hondureños (art. 13).

No podrán hacer reclamación ni exigir indemnización alguna del Estado, sino en los casos y en la forma en que pudieran hacerlo los hondureños (art. 14).

Los extranjeros no podrán ocurrir a la vía diplomática sino en los casos de denegación de justicia. Para este efecto, no se entiende por denegación de justicia que un fallo ejecutoriado no sea favorable al reclamante. Si contraviniendo esta disposición, no terminaran amistosamente las reclamaciones y se causaran perjuicios al país, perderán el derecho de habitar en el país (art. 15).

La extradición sólo podrá otorgarse en virtud de ley o de tratado, por delitos comunes graves; nunca por delitos políticos aunque por consecuencia de éstos resulte un delito común (art. 16).

Las leyes podrán establecer la forma y casos en que pueda negarse al extranjero la entrada al territorio de la Nación u ordenarse su expulsión por considerarlo pernicioso (art. 17).

La entrada puede negarse a los extranjeros o decretarse su expulsión:

1°. Cuando padecieran enfermedades graves o contagiosas.

2°. Cuando hayan cometido en otra parte delitos graves que no sean castigables en Honduras.

3°. Cuando hayan alterado o intenten alterar el orden público.

4°. Cuando sean de conducta notoriamente viciada o perturbadora.

Las disposiciones constitucionales que anteceden no modifican los tratados existentes entre Honduras y otras naciones (art. 19).

LAS TIERRAS DE HONDURAS—MODOS DE ADQUIRIRLAS.

El interesado o su representante legal debe presentarse a la administración de Rentas del departamento en que los terrenos que desee adquirir estén situados, haciendo la denuncia con la demarcación respectiva y expresando su deseo de adquirirlos. El administrador manda hacer la averiguación de si el terreno denunciado es de propiedad nacional, y probada ésta, ordena se mida por un agrimensor y en seguida decreta la venta en subasta pública. El denunciante tiene el derecho de ser preferido en ella por el tanto que resulte de la puja.

Los terrenos se dividen en cuatro clases:

1ª. Terrenos que se encuentren a 30 kilómetros del mar, a 20 de un ferrocarril construido o en construcción, de un río o lago navegable, los que siendo propios para la agricultura se encuentren a igual distancia de una ciudad importante, de una gran empresa minera o de un camino carretero que conduzca hasta la costa y los lotes reservados al Gobierno en las concesiones que éste hace.[1]

2ª. Terrenos propios para la agricultura en otros lugares que los anteriores y los que estén poblados de bosques.

3ª. Terrenos de cualquier otra clase que los dichos, situados a 20 kilómetros de una ciudad importante y de una gran empresa minera o a 4 kilómetros de un camino carretero que comunique con la costa.

4ª. Terrenos que sólo sirven para la crianza de ganado.

Los precios fijados actualmente para servir de punto de partida a la subasta, susceptibles de ser variados por una nueva ley, son: $4.00 para los terrenos de primera clase, por hectárea; $3.00 para los de segunda, $2.00 para los de tercera y $1.00 para los de cuarta.

Están excluídos de la venta los terrenos nacionales del litoral de ambos mares hasta la distancia que señala la ley, lo mismo que los de las islas y cayos; pero puede darlos en arrendamiento. Lo mismo ocurre con los terrenos municipales, que tampoco son enajenables; pero sí pueden ser arrendados por un módico canon.

Los terrenos de propiedad particular tienen precios muy variables según su clase y su situación especialmente. Los precios corrientes fluctuan entre $5.00 y $100.00 por manzana; pero en los distritos bananeros, por ejemplo, se pagan a mucho más precio.

POSESIÓN Y PROPIEDAD DE LAS MINAS.

Los extranjeros pueden adquirir minas en Honduras, así como cualquier otro inmueble, en las mismas condiciones que los hijos del país.

Los particulares de cualquier nacionalidad que sean, individualmente o en compañías y sociedades, pueden adquirir libremente las minas del Estado, cualquiera que sea su origen y la forma de su nacimiento, ya estén en terreno nacional, municipal o particular. Las minas de toda clase de minerales pueden ser adquiridas en propiedad, con excepción de las de azufre, salitre, carbón y demás fósiles, cuya explotación ha de hacerse por medio de contratas celebradas con el Gobierno. Son también de libre aprovechamiento las arenas auríferas y estaníferas, y cualesquiera otros productos de los ríos y placeres, siempre que se encuentren en terrenos eriales de cualquier dominio; sin embargo cuando la explotación se haga en establecimiento fijo, se formarán pertenencias mineras.

La ley concede la propiedad perpetua de las minas a los particulares, bajo la

[1] La República de Honduras. Breve reseña. 1904.

condición de pagar anualmente $5.00 por cada hectárea de extensión superficial que comprendan y sólo se entiende perdida esa propiedad y devuelta al Estado, por la falta de cumplimiento de la dicha condición.

La facultad de catear y cavar en tierras de cualquier dominio para buscar minas, puede ejercerse libremente en terrenos no cerrados o que no estén dedicados al cultivo; para hacerlo en los cultivados se necesita licencia del dueño o de su representante legal y en caso de negativa la del juez de Letras de la jurisdicción, previa audiencia de los interesados.

El propietario de mina es dueño exclusivo dentro de los límites de su pertenencia y en toda la profundidad, de todas las sustancias minerales que existan o se encuentren en ella.

La propiedad minera que caduque por falta de pago del impuesto antes consignado, se saca a subasta por el juez, previa declaratoria de caducidad, adjudicándola al mejor postor, con la condición de que continue pagando la patente respectiva. Del importe del remate se retendrá para el Fisco la cantidad adecuada, que será la postura menor aceptable, y el resto, con deducción de las costas, se devolverá al propietario anterior. Este podrá suspender el remate pagando el doble de lo adeudado. No habiendo postores el juez mandará archivar las diligencias par el caso de que alguien se presente solicitando se abra de nuevo el remate. Pasados cinco años, quedará franco el terreno y denunciable por cualquier interesado, salvo que éste prefiera rematar la propiedad, pagando el impuesto adeudado en dicho término.

Los mineros gozan por ley de 18 de noviembre de 1882, de las franquicias siguientes: la de exportar libre de derechos el metal que beneficien, oro, plata, etc.; la de introducir máquinas de toda especie destinadas a sus empresas, como las de extraer metales, trabajar hierro y acero, aserrar madera y demás que necesiten, materiales para ensayar brozas, crisoles, hornillos para fundir, reactivos químicos para análisis, sustancias químicas para combinación, máquinas para moler y extraer de las brozas el metal que contengan, aparatos de vidrios y vasijas para operaciones químicas, velas, tiendas de tela, etc.

Las empresarios de minas hacen suyas las maderas que están dentro de la zona concedida y pueden extraer para uso de la misma, madera de cualquier terreno nacional o ejidal, sin otra restricción que pedir permiso para ello al Gobierno o al Municipio que corresponde. Asimismo pueden aprovechar las aguas de su pertenencia o de terrenos nacionales o ejidales, como fuerza motriz o de cualquier otra manera que sea útil a la empresa.

Para los trabajos en grande escala en el ramo de minería, pueden solicitarse del Gobierno zonas mineras que no excedan de mil hectáreas y serán concedidas dichas zonas en la extensión proporcionada a los medios con que cuente el solicitante para hacer la explotación.

Como se ve por los párrafos que acabamos de reproducir, no pueden ser más liberales las concesiones que Honduras otorga a los que emprenden la explotación de sus minas. Ellas facilitan grandemente el trabajo en grande escala y son alicientes para que vengan al país mineros, empresarios y capitalistas, seguros de encontrar en él remuneración a su trabajo e interés halagador a sus capitales.

CONCLUSIONES.

Para terminar esta "Noticia" suscinta y llenar enteramente el fin que nos hemos propuesto al redactar este trabajo, nos quedan que exponer algunas consideraciones, breves y precisas, acerca de la entidad política y moral que se denomina *República de Honduras.* Estas consideraciones comprenderán la re-

unión compleja de los hábitos nacionales y populares, los elementos que han tenido alguna influencia sobre ellos, la organización central, provincial y local, los caracteres propios de la sociedad y las relaciones que existen entre las diferentes clases y sus diversos miembros, el sistema especial de la administración pública en sus ramos más importantes, y, por último, las demás particularidades que deberán completar el cuadro que los documentos estadísticos nos ofrecen y que podrán hacer que se conozca mejor el carácter de esta nación, su estado presente y su porvenir.

Orden político y administrativo.—El Gobierno de Honduras es representativo, republicano y democrático: concurren a formarlo tres poderes, independientes entre sí: Legislativo, Ejecutivo y Judicial.

El Poder Legislativo se ejerce por una cámara única que se denomina Congreso, elegidos sus miembros popular y directamente, sobre la base de un diputado propietario y un suplente por cada 10,000 habitantes.

El Congreso se reune todos los años, el 1° de enero, en la capital de la República, en virtud de un precepto constitucional. El período de sus sesiones es de 60 días, prorrogable hasta por 40 más y el Ejecutivo tiene facultades para convocarlo extraordinariamente siempre que lo crea preciso, para uno o varios asuntos determinados y por el tiempo que sea necesario para resolverlos.

El Congreso no sólo es el encargado de legislar, dictando leyes, derogándolas o reformándolas, sino que califica la elección de los individuos que forman el Poder Ejecutivo y el Judicial, aprueba o no los actos del primero, elige anualmente los Designados a la Presidencia, nombra el Tribunal Superior de Cuentas, decreta impuestos, forma el presupuesto y ejerce todas las demás facultades que le señala la Constitución.

El Poder Ejecutivo se ejerce por un ciudadano que se denomina Presidente de la República, en su defecto por un Vicepresidente ambos también de elección popular y directa; y a falta de ambos por un designado de los tres que anualmente elige el Congreso, por el orden de su elección.

El Presidente ejerce sus funciones por medio de Secretarios de Estado, tres en número a lo menos, responsables solidariamente con él. Sin el concurso de un Secretario de Estado no son válidos los actos del Ejecutivo.

En la actualidad existen seis Secretarías de Estados, encargadas del despacho de los siguientes ramos: de Relaciones Exteriores, de Gobernación (Interior) y Justicia, de Guerra y Marina, de Fomento, Obras Públicas y Agricultura, de Instrucción Publica y de Hacienda y Crédito Publico. No existe en Honduras el cargo de Presidente del Consejo.

Cada Secretaría de Estado tiene un subsecretario y los directores generales de los diversos servicios que comprende cada ramo. Además el personal subalterno, al frente del cual se encuentra un oficial mayor en cada ministerio o secretaría de Estado.

Del Ministerio de Justicia depende cuanto se refiere a los Tribunales, a la magistratura, al registro y conservación de la propiedad y a la administración de la justicia ordinaria, tanto en materia civil como criminal.

El de Gobernación abraza la beneficencia, la sanidad, las prisiones, etc., y el de Fomento, Obras Públicas y Agricultura, a más de los dos ramos especiales a que se refiere su nombre, comprende las líneas telegráficas, telefónicas, el correo, la industria y el comercio, etc. Los títulos de los demás departamentos ministeriales, expresan bien claramente los ramos que están bajo su dirección y vigilancia.

El Poder Judicial lo ejerce una Corte Suprema de Justicia compuesta por cinco Magistrados propietarios y tres suplentes, cuatro Cortes de Apelaciones y dos jueces de que se hizo mención al ocuparnos de la división judicial de la República. Los Magistrados de la Corte Suprema tanto propietarios como suplentes

son también de elección popular directa. Los demás funcionarios judiciales, incluso los magistrados de las Cortes de Apelaciones, son de nombramiento de la Corte Suprema de Justicia.

A la cabeza de cada departamento, hay un *Gobernador político* de nombramiento del Ejecutivo y cuya autoridad se extiende a todos los diversos ramos de la administración, excepto el judicial encomendado a los funcionarios respectivos. Hay además un *Consejo departamental*, con funciones señaladas en la ley y elegidos por una Junta de Agentes nombrados uno por cada municipalidad del departamento respectivo.

Cada uno de los 253 municipios en que se divide la República tiene su *Concejo Municipal o Municipalidad*, elegido por el pueblo y un *Consejo Municipal* nombrado por aquella Corporación, de la que es asesor. Los Concejos y Consejos municipales se hallan bajo la dirección del Ministerio de Gobernación y de los Gobernadores políticos.

De la *Instrucción Pública* está a cargo del Estado y de las Municipalidades, la *primaria*, la que por la ley es *obligatoria, gratuita y laica*. El Estado costea por sí solo la enseñanza *secundaria*, la *superior* o *universitaria* y también la *profesional*.

Según el censo escolar lavantado en los primeros meses del año repetido de 1913, el número de niños de ambos sexos de 7 a 15 años existentes en Honduras, era de 80,950. De éstos recibían instrucción 37,897 y no la recibían 43,053. Según estas cifras el número de niños que no reciben instrucción alguna representa el 53.18 por ciento del total de los empadronados. Mas para juzgar de la importancia del desarrollo de la instrucción en el país, no bastan esos datos: precisa tomar en cuenta los que siguen:

Los niños matriculados sumaron 40,565. La diferencia que se nota entre esta cifra y la antes señalada de 37,897, de 2,668, corresponde a los niños matriculados en las escuelas, mayores de 15 años.

El promedio de asistencia diaria a las escuelas dió la suma de 30,196.

Se examinaron únicamente 17,265 y de éstos fueron aprobados 12,372, o sea el 15.28 por ciento del total de niños existentes en Honduras y el 30.49 por ciento del total de niños matriculados.

Del total de niños asistentes a las escuelas hay que señalar que corresponden a las *Escuelas Rurales*, de reciente creación, 7,398. Debe aumentarse a aquel total la suma de 263 niños de uno y otro sexo, alumnos de la Escuela de Párvulos, de Tegucigalpa.

Funcionaron en el año a que venimos refiriéndonos 916 escuelas, de ellas 466 para varones, 294 para niñas, 126 mixtas, 20 privadas y 10 para adultos. A estas últimas concurrieron 882 alumnos.

El personal docente fué de 1,138 maestros.

Las escuelas ocuparon 905 edificios, de éstos 606 propios y 299 arrendados. En la actualidad se construyen otros edificios con destino a escuelas públicas.

El costo total de la instrucción primaria fué de $556,433.75. De esta suma fué pagada por las municipalidades la de $413,173.46 y por el Gobierno $143,260.29.

Durante el año se pidió al extranjero material de enseñanza por valor de $10,500 oro, que se distribuyó entre las escuelas. Ademas el Gobierno proporcionó a éstas:

4,000 ejemplares de la "Enseñanza de la Lectura y Escritura simultáneas."

358 libros para las bibliotecas escolares.

40 ejemplares de la "Enseñanza Moderna del dibujo."

20,000 cartillas para las escuelas rurales y 500 mapas de Honduras.

Por disposición del Gobierno el 15 de mayo de cada año se celebra la fiesta de los "Arboles." En el año de 1913 concurrieron a ella en toda la República más de 22,000 niños.

También se celebra anualmente una Exposición escolar, que coincide con la fiesta de los árboles.

Para proveer de maestros a las escuelas de la República existen escuelas normales, a saber: en Tegucigalpa, una Escuela Normal para varones y otra para señoritas. En la de varones hubo en el año a que venimos refiriéndonos 277 alumnos matriculados, de los cuales 152 pertenecían a una Escuela primaria anexa y 125 a la Normal. De éstos fueron internos 141, medio internos 3 y externos 133. El Gobierno costeó becas a 117, siendo de su cuenta todos los gastos que ocasionaron; también les suministró los libros de texto que les fueron necesarios. Es éste un establecimiento que puede señalarse como modelo, que dispone de edificio propio, construído al efecto. Tiene a su frente un Director, quien tiene a sus órdenes un cuerpo de 26 profesores y 12 empleados administrativos, además del personal correspondiente para el servicio; 19 fueron los alumnos que obtuvieron el título de maestros.

La Escuela Normal de Señoritas, establecida en Tegucigalpa, tuvo también 277 alumnas matriculadas, correspondiendo 171 a los estudios del Magisterio y 86 a la Escuela Práctica anexa. De las primeras fueron internas 79.

En el año referido recibieron el título de maestras 22 alumnas. De las alumnas matriculadas se presentaron a examen 136 en los exámenes ordinarios y 27 en los extraordinarios.

Bajo el título de Escuela Normal de Varones, de Occidente, se halla funcionando en La Esperanza, departamento de Intibucá, un establecimiento para la preparación de maestros, dotado de material científico y mobiliario pedidos especialmente para él por el Gobierno. En él se inscribieron 36 alumnos correspondientes a los estudios normales.

Secciones normales hay establecidas en las cabeceras departamentales de Olancho, Santa Bárbara y Copán, respectivamente Juticalpa, Santa Bárbara y Santa Rosa. En el curso correspondiente, en el año a que nos referimos, en la sección normal de Juticalpa se matricularon 64 alumnos y 29 en los dos últimos grados de la Escuela de Aplicación: en la Sección de Santa Bárbara 48 alumnos, de los cuales 36 eran señoritas y 12 varones. Además en la Escuela práctica hubo 20 alumnos matriculados; y en Copán hubo 28 alumnos del magisterio o de enseñanza normal y 30 en la Escuela práctica anexa. Estas secciones han aumentado en el año último con la anexa al Colegio de 2ª enseñanza de Gracias, que es de varones, y otra de señoritas establecida en la ciudad de Santa Rosa de Copán.

La enseñanza secundaria se da en Honduras en cinco establecimientos de esta clase: el Instituto Nacional, de Tegucigalpa; y los Colegios Nacionales de 2ª enseñanza de Santa Rosa de Copán, de Juticalpa, de Santa Bárbara y de Gracias. Los cinco dan validez oficial a los estudios que en ellos se hacen; pero el último de los colegios es de carácter particular, subvencionado por el Gobierno.

En el Instituto Nacional hubo en el año tan repetido 54 alumnos matriculados. En el Colegio de Juticalpa, 13 alumnos, 19 en el de Copán, en el de Santa Bárbara 37 y 8 en el de Gracias.

Existe, además, en Tegucigalpa, unida al Instituto Nacional, una Escuela de Comercio, que tuvo 123 alumnos, y una Escuela Nacional de Música 42 alumnos matriculados.

La enseñanza profesional se da en la Universidad Central de la República, que conserva este nombre todavía, de la época en que hubo otra Universidad, en Santa Rosa de Copán, llamada "de Occidente."

La Universidad comprende las facultades de Jurisprudencia y Ciencias Políticas, Medicina, Cirujía y Farmacia y Ciencias. Está regida aquélla por un Rector y éstas por decanos de cada una de las Facultades.

En el año que nos ocupa se expidieron 16 títulos: 13 de licenciado en Jurisprudencia y Ciencias Políticas y 3 de licenciado en Medicina y Cirujía, verificándose en esta última Facultad dos exámenes de incorporación de profesionales extranjeros.

La Facultad de Jurisprudencia y Ciencias Políticas tuvo 23 alumnos matriculados.

Para favorecer el desarrollo de la enseñanza del magisterio y contribuir a la formación de profesionales competentes, el Gobierno a más de sostener en el país los establecimientos de enseñanza mencionados, con carácter oficial y además de subvencionar otros de carácter privado, costea la enseñanza personal de un número determinado de jóvenes, en el interior y en el exterior del país los que viven y se educan con fondos del Estado.

El número de becas concedidas para los estudios del magisterio fué y es de 200, siendo 120 para varones y 80 para señoritas, distribuídas entre todos los departamentos de la República, poniendo el Gobierno especial empeño en que los jóvenes de las Islas de la Bahía obtuvieran becas también para facilitar la educación e instrucción de los habitantes de aquellas islas, al mismo tiempo que, por el idioma y costumbres, su asimilación completa a la nación de que forman parte.

En el extranjero tiene el Gobierno de Honduras 36 becas, distribuídas entre otros tantos jóvenes que siguen carreras literarias, estudios profesionales y aún algún oficio especial.

Religión.—Como queda dicho ya, en Honduras no sólo existe libertad completa de cultos, sino que a la vez la Iglesia está separada del Estado. Sin embargo, la población hondureña es en su casi totalidad *católica, apostólica* y *romana.* El clero que fué poseedor de bienes territoriales y muebles y que disfrutaba también de los impuestos del diezmo y de las primicias hasta 1880, no recibe en la actualidad sino las limosnas y ofrendas voluntarias de los fieles, y ciertos derechos por la administración de sacramentos. Esta situación de la Iglesia Católica en Honduras no está reconocida oficialmente por la Santa Sede; pero sí de una manera tácita, puesto que cultiva relaciones oficiales amistosas con el Gobierno de la República, en la que tiene acreditado un Delegado Apostólico. La Iglesia Católica y las comuniones reformadas que tienen alguna representación y adeptos en el país, gozan de completa independencia en el desarrollo de sus funciones y libremente ejercen su influencia en sus fieles. En Honduras está absolutamente prohibida la existencia de comunidades religiosas de uno y otro sexo.

Carácter y costumbres.—No obstante la diferencia marcada del clima y aun del suelo de las diversas zonas de la República, dichas variedades no tienen grande ni pequeña influencia sobre los usos y costumbres de sus habitantes respectivos, salvo en los de la región oriental de la Costa Norte, los cuales por su diferente raza y aun por su idioma, pues a consecuencia del dilatado establecimiento en aquella región de los ingleses, adoptaron la lengua de éstos, mezclada con las suyas primitivas, y, aun en la actualidad, después de 52 años de haber entrado a formar parte del Estado de Honduras, todavía es el inglés su idioma, sus costumbres no se asemejan a las de los demás hondureños, lo mismo que sus gustos y ocupaciones.

Respecto de éstas, la naturaleza del suelo hace que predominen unas u otras, según las circunstancias de él. En todo el país predomina el cultivo del maíz; pero sólo en cantidad suficiente para el consumo, pudiéndose producir

con exceso para la exportación; pero sin caminos cómodos y fáciles, sin vías férreas que ofrezcan fletes baratos, esa exportación es enteramente imposible.

En las altiplanicies se cultiva el trigo, especialmente en los departamentos occidentales y en algunos de los orientales, como El Paraíso, y también otros granos. El tabaco es patrimonio principalmente de los departamentos de Copán, Santa Bárbara y del dicho de El Paraíso, cultivándose también en los de Intibucá, Olancho y otros, aunque en menor escala. Gran parte de la costa Norte está dedicada al cultivo del banano, también el coco, la lima y otros frutos. Por lo demás, como ya hemos repetido, la variedad de alturas y de climas, por consiguiente, en el territorio hondureño, lo hacen apto para los cultivos de todas las zonas. Se dan muy bien la caña de azúcar, de cuyo zumo se fabrica, así como el aguardiente; el algodón, que antes se cultivaba en alguna escala, para el abastecimiento de los telares establecidos entonces en la República, y el henequen y otras fibras textiles de muy grande importancia.

En Honduras se produce muy bien la vid, las frutas de las zonas templadas y cereales de todas clases. Vías de comunicación, repetimos, son las que faltan para poner en explotación y en valor muy dilatados y fertilísimos territorios, que podrían dar y darán ciertamente, algún día, una producción exhuberante.

Como queda ya dicho, la industria minera, muy acreditada en Honduras en tiempos pasados, es susceptible de un gran desarrollo. Ella constituye la ocupación predilecta de los habitantes de algunos de los departamentos de la República, y las minas descubiertas, en laboreo, y aun las abandonadas, ofrecen al empresario y al capitalista remuneración halagadora de una actividad bien empleada.

En lo general, si bien es cierto que si se recurre a los documentos que la estadística recoge y estudia sobre el estado de cultura y de bienestar, Honduras no tiene por qué enorgullecerse, sobre todo ante una crítica severa, no tiene sin embargo por que ruborizarse tampoco si se ponen en parangón con los de otras naciones, el carácter del pueblo hondureño y las condiciones en las cuales se encuentra hoy. Los cuadros que acompañan a esta "Noticia" son prueba patente de lo que afirmamos.

Por consecuencia de las guerras exteriores y civiles que han afligido a generaciones de hondureños, así como de las vicisitudes, conmociones y perturbaciones recientes a las cuales no ha podido escapar clase alguna de la sociedad, es incontestable que en el movimiento de progreso de las ciencias, de las artes y de todas las industrias, y en medio de las muchas conquistas políticas y sociales realizadas para el bien moral y material de los hondureños, la disciplina social se ha relajado, las creencias religiosas se han debilitado, determinados lazos de las conveniencias se han desanudado y la fuerza de la autoridad se halla disminuída.

Sin embargo, se encuentran aún costumbres sencillas y patriarcales, sobre todo en los pueblos, aldeas, y caseríos de los campos y montañas, alejados del movimiento de los negocios y de las preocupaciones de la vida moderna, en los cuales existe todavía el espíritu de mutuo apoyo y de sinceridad casi absoluta para todos los actos de la vida, especialmente para la de relación.

El movimiento hacia el progreso.—Entre las reformas modernas que más han contribuído al desarrollo de la riqueza agrícola, al bienestar de una gran parte del país y a hacer que un gran número de personas, antes pobres, se hayan hecho propietarios en mayor o menor escala, debemos mencionar la abolición de los diezmos que eran una carga casi exclusiva para la agricultura, la supresión de los mayorazgos y de toda clase de privilegios y las facilidades que la ley agraria ha dado a toda clase de personas para obtener

en propiedad tierras nacionales, en términos tales que es posible la adquisición de ellas, repartiéndose entre muchos y evitándose así la acumulación de la propiedad en unas pocas manos. En la costa Norte especialmente, en donde la industria bananera ha adquirido tan gran desarrollo, casi puede decirse que no hay ya tierras baldías, en toda la región apta para aquel cultivo.

Los ejidos que en otras partes han desaparecido o están en vías de desaparecer, han sido y son en Honduras la salvaguardia de los pueblos, en cuanto a que, con ellos, los vecinos disfrutan de terreno para sus siembras, disponen de combustible y tienen a mano pastos suficientes para sus ganados, asegurándose así estos recursos para la población y evitándole que el egoísmo o la especulación de propietarios particulares hagan imposible la vida de los pueblos.

Para terminar haremos la indicación de que conviene rectificar las opiniones erróneas que se han propagado, en el interior de Honduras y en el exterior, sobre la riqueza positiva de la República, que ha sido por unos ensalzada de manera ampulosa y por otros rebajada hasta el desdén. Para los que hablan sin ton ni son de las riquezas exhuberantes del país, debemos recordar que no es riqueza lo que no es útil, por valioso que pueda ser según el criterio vulgar, hasta que la industria y el trabajo lo ponen en valor: es decir, les dan la condición de utilidad.

Honduras, por la poca población que ocupa su territorio en comparación con la extensión de éste; por la irregularidad de la estación lluviosa en algunas de sus más fértiles regiones y por otras causas políticas e históricas, no es tan rica en producciones como podría y debería ser; pero no es tan pobre tampoco como la suponen los que desde el exterior la desconocen, siempre que se exploten sus minas y sus terrenos y sus múltiples recursos naturales, en su mayoría sin aplicación útil en la actualidad.

Es lo cierto que muchas industrias productivas y posibles faltan en el país, y que domina en la juventud al afán por los empleos más que por las industrias, artes y oficios. Pero también es efectivo que en estos últimos años se ha observado un movimiento de progreso muy notable, que se manifiesta en el desarrollo de las rentas públicas, especialmente en las de aduanas y en el establecimiento de industrias nuevas por todo el país.

Tal es la Honduras de hoy. Hemos hecho su bosquejo de manera imparcial, dejando a un lado todas las exageraciones orgullosas que engendra la ignorante vanidad y un patriotismo falso, así como las causas de depreciación que los prejuicios imaginan de costumbre y que la ignorancia y la envidia abultan. Tal es su presente: el territorio de la República encierra los gérmenes vivos de un porvenir mejor.

Existen ciertamente elementos de riqueza explotables y que poner en valor, para realizar la importancia de los ingresos de particulares y del Estado y para que el país disfrute del crédito que merece, sin ampulosas exageraciones; pero también sin prevenciones injustificadas. La fortuna pública y la privada puedan aumentarse aún de una manera indefinida si se llevan a cabo con energía y decisión medidas que han madurado ya en el vasto campo de las ideas; si se consigue sacar del suelo desde el punto de vista agrícola, el partido que ofrecen poblaciones dóciles, situación excepcional, tierras muy fecundas y productos excelentes de todas las zonas.

Si, además, se llegan a explotar en grande escala y por medios adecuados la gran riqueza forestal y minera de Honduras, si una colonización numerosa puebla y transforma en campos exhuberantes de producción las tierras actuales desiertas y vírgenes; si los capitales y la inteligencia se unen para utilizar, en fuerza motriz y para alimentar la irrigación de las tierras, las corrientes de agua que existen; si, acelerando, por último, en medio de la abundancia, el

aumento de la población y de sus recursos, se dan mayores facilidades a los medios de comunicación y de transporte por la creación de caminos de toda especie, que permitan que un excedente posible y hasta seguro de producción nacional encuentre el medio de obtener el mejor mercado, sea dentro del pais o más allá de sus costas y fronteras.

Que Honduras pueda gozar durante largo tiempo del beneficio inestimable de la paz; que las señales más ciertas de su vitalidad sean el trabajo, la instrucción y la moralidad y llegará ciertamente a alcanzar la importancia que con sus grandes recursos puede conseguir, y a colocarse al nivel de los pueblos más adelantados. Medios no le faltan para realizar tan patriótico desideratum.

CUADROS ESTADÍSTICOS.

Población de Honduras calculada al 31 de Diciembre de 1912.

Departamentos.	Población de 1911.	Crecimiento vegetativo.	Población de 1912.
Tegucigalpa	83,247	1,808	85,055
Gracias	51,173	856	52,029
Olancho	44,152	966	45,118
Choluteca	46,473	870	47,343
El Paraíso	42,866	881	43,747
Copán	41,291	875	42,166
Santa Bárbara	40,028	1,069	41,097
Valle	31,073	621	31,694
La Paz	29,519	745	30,264
Ocotepeque	29,053	804	29,857
Intibucá	27,642	717	28,359
Comayagua	27,060	746	27,806
Cortés	23,954	458	24,412
Yoro	19,254	317	19,571
Atlántida	11,543	95	11,638
Colón	11,328	214	11,542
Islas de la Bahía	5,000	108	5,108
	564,651	12,155	576,806
Año de 1911:			
Movimiento migratorio	1,366		1,366
Año de 1912:			
Movimiento migratorio			310
	566,017	12,155	578,482

Instrucción de los habitantes de la República de Honduras, 1910.

RESUMEN.

Número.	Departamentos.	Alfabetas.	Analfabetas.	Total.
1	Tegucigalpa	23,995	59,697	83,692
2	El Paraiso	9,901	32,408	42,309
3	Choluteca	10,915	35,272	46,157
4	Valle	6,217	24,407	30,624
5	La Paz	5,288	23,705	28,993
6	Comayagua	6,736	20,813	27,549
7	Copán	6,828	33,857	40,685
8	Santa Barbara	8,018	31,133	39,151
9	Intibuca	4,909	22,461	27,370
10	Gracias	16,344	33,780	50,124
11	Ocotepeque	5,050	23,199	28,249
12	Cortés	8,685	14,880	23,565
13	Yoro	4,358	14,629	18,987
14	Olancho	8,686	34,798	43,484
15	Colón	2,610	8,590	11,200
16	Atlántida	3,790	7,888	11,678
17	Islas de la Bahía	2,823	2,187	5,010
	Total general	135,153	423,704	558,857

Raza de los habitantes de la República de Honduras en el año de 1910.

RESUMEN.

Departamentos.	Ladinos.	Indios.	Blancos.	Negros.	Amarillos.	Mulatos.	Mestizos.	Total.
Tegucigalpa	57,647	16,795	1,721	405	117	409	6,598	83,692
El Paraíso	22,420	3,565	3,027	810	2,776	150	9,561	42,309
Choluteca	35,665	2,887	1,389	790	919	107	4,430	46,187
Valle	21,444	6,959	912	62	....	463	784	30,624
La Paz	15,958	8,149	800	1,010	538	3,538	1,000	28,993
Comayagua	13,050	9,232	1,301	400	330	188	3,048	27,549
Copán	28,612	3,054	2,750	312	697	412	4,848	40,685
Santa Bárbara	25,439	5,312	7,139	82	54	1,027	98	39,151
Intibucá	15,166	11,059	838	41	51	24	191	27,370
Gracias	24,626	13,215	100	3,680	40	5,631	2,832	50,124
Ocotepeque	16,557	2,197	818	832	128	1,726	5,991	28,249
Cortés	15,001	748	847	1,195	204	2,753	2,817	23,565
Yoro	12,977	225	2,589	1,000	352	....	1,844	18,987
Olancho	27,385	5,253	620	2,556	410	1,201	6,059	43,484
Colón	4,328	826	1,487	3,087	31	13	1,428	11,200
Atlántida	6,035	137	1,574	788	769	315	2,060	11,678
Islas de la Bahía	1,343	856	68	2,126	....	317	300	5,010
Total	341,653	90,469	27,980	19,176	7,416	18,274	53,889	558,857

Nacimientos habidos en la República de Honduras durante el año de 1912.

Departamentos.	Ladinos.				Indios.				Total.	
	Legítimos.		Naturales.		Legítimos.		Naturales.			
	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
Tegucigalpa	570	509	906	770	71	52	106	98	1,653	1,429
Gracias	348	286	194	177	179	153	152	134	873	750
Choluteca	281	279	440	420	8	12	11	10	740	727
Olancho	391	398	380	336	50	34	46	67	867	835
El Paraíso	254	199	406	372	67	47	164	149	891	767
Copán	346	306	444	409	13	14	77	60	880	789
Sta. Barbara	481	387	375	369	19	21	47	46	922	823
Valle	189	174	322	310	10	5	40	32	561	521
La Paz	62	67	53	47	252	222	206	188	573	524
Ocotepeque	313	284	240	253	58	38	69	62	686	673
Intibucá	194	171	129	131	176	140	219	237	718	671
Comayagua	286	215	265	269	18	15	47	51	616	550
Cortés	148	115	428	407	2	1	11	17	589	540
Yoro	139	108	194	183	2	1	15	7	350	299
Atlántida	57	42	235	218	2	1	5	....	299	261
Colón	31	26	90	96	19	16	86	98	226	236
Islas de la Bahía	44	26	15	11	30	34	11	9	100	80
Total	4,134	3,592	5,122	4,778	976	806	1,312	1,265	11,544	10,441

Síntesis comparativa de los nacimientos habidos en la república.

	1912			1911		
	Legítimos.	Naturales.	Total.	Legítimos.	Naturales.	Total.
Ladinos	7,726	9,900	17,626	7,718	9,776	17,494
Indios	1,782	2,577	4,359	1,763	2,568	4,331
Total	9,508	12,477	21,985	9,481	12,344	21,825

	Hombres.	Mujeres.	Total.	Hombres.	Mujeres.	Total.
Ladinos	9,526	8,370	17,626	9,129	8,365	17,494
Indios	2,288	2,071	4,359	2,209	2,122	4,331
Total	11,814	10,441	21,985	11,338	10,487	21,825

Natalidad absoluta y relativa en la República de Honduras.

Departamentos.	Cifras absolutas.		Cifras relativas (por ciento).	
	1911	1912	1911	1912
Tegucigalpa	2,927	3,082	35.16	36.23
Gracias	1,987	1,623	38.78	31.18
Cholutoca	1,228	1,461	26.46	30.85
Olancho	1,610	1,702	36.46	37.72
El Paraíso	1,681	1,658	39.21	37.89
Copán	1,786	1,660	43.25	39.68
Santa Bárbara	1,698	1,745	42.42	42.46
Valle	1,025	1,082	32.97	34.14
La Paz	1,387	1,097	46.99	36.10
Ocotepeque	1,331	1,323	45.81	44.31
Intibucá	1,348	1,397	48.59	49.20
Comayagua	1,113	1,166	41.13	41.93
Cortés	959	1,120	40.03	46.24
Yoro	657	649	38.80	33.16
Atlántida	493	560	42.70	48.85
Colón	425	462	37.51	40.02
Islas de la Bahía	170	180	34.75	35.49
Total	21,825	21,985	35.55	38.00

Natalidad comparada.

Países.	Años.	Por ciento.	Países.	Años.	Por ciento.
Rumania	1910	39.8	España	1910	33.1
Servia	1909	38.7	Holanda	1910	28.6
Honduras	1912	38.0	Noruega	1910	26.1
Chile	1910	38.0	Gran Bretaña	1910	25.0
Argentina	1908	38.0	Dinamarca	1910	27.0
Hungría	1910	35.0	Suiza	1909	25.6
Uruguay	1909	32.0	Bélgica	1909	23.1
Imperio Alemán	1909	31.0	Francia	1910	19.7

Fallecidos en la República durante el año de 1912.

Departamentos.	Estado civil.						Raza.					
	Solteros.		Casados.		Viudos.		Ladinos.		Indios.		Total.	
	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
Tegucigalpa	556	438	113	65	36	66	612	486	93	[illegible]	705	560
Gracias	249	266	63	83	45	61	195	226	162	182	357	410
Choluteca	235	223	49	36	19	29	298	283	5	5	303	288
Olancho	311	243	61	50	30	41	351	298	51	36	402	334
El Paraíso	307	299	58	46	28	39	307	288	86	96	393	384
Copán	343	299	58	40	23	31	395	354	29	16	424	370
Sta. Bárbara	285	232	56	42	25	36	339	292	27	18	366	310
Valle	185	168	34	25	17	27	213	200	23	20	236	220
La Paz	122	139	38	29	6	18	32	33	134	153	166	186
Ocotepeque	196	189	46	31	20	37	210	223	52	34	262	257
Intibucá	234	261	63	55	29	38	148	140	178	214	326	354
Comayagua	163	138	38	34	17	30	201	191	17	11	218	202
Cortés	300	261	37	32	14	27	346	316	5	4	351	320
Yoro	143	118	24	11	12	24	169	144	10	9	179	153
Atlántida	247	170	22	9	6	11	271	189	4	1	275	190
Colón	115	101	7	12	2	11	70	72	54	52	124	124
Islas de la Bahía	28	14	4	17	2	7	12	11	22	27	34	38
Total	4,019	3,559	771	617	331	533	4,169	3,748	952	961	5,121	4,709

Fallecidos en la República durante el año de 1912.

	Nacionalidad.				Religión.				Total.	
	Hondureños.		Extranjeros.		Católicos.		Otras creencias.			
	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
Tegucigalpa	705	569	....	....	705	569	....	....	705	569
Gracias	357	408	....	2	357	410	....	....	357	410
Choluteca	303	288	....	....	303	288	....	....	303	288
Olancho	402	334	....	....	402	334	....	....	402	334
El Paraíso	393	384	....	....	393	384	....	....	393	384
Copán	400	363	24	7	418	369	6	1	424	370
Santa Bárbara	364	310	2	....	366	310	....	....	366	310
Valle	234	220	2	....	236	220	....	....	236	220
La Paz	166	186	....	....	166	186	....	....	166	186
Ocotepeque	258	254	4	[illegible]	262	257	....	....	262	257
Intibucá	326	354	....	....	326	354	....	....	326	354
Comayagua	218	202	....	....	218	202	....	....	218	202
Cortés	331	312	20	[illegible]	346	317	5	3	351	320
Yoro	179	153	....	....	179	153	....	....	179	153
Atlántida	261	184	14	6	269	187	6	3	275	190
Colón	123	124	1	....	124	124	....	....	124	124
Islas de la Bahía	9	3	25	35	7	3	27	35	34	[illegible]
Total	5,029	4,648	92	61	5,077	4,667	44	42	5,121	4,709

Síntesis de la mortalidad habida en el año de 1912.

Departamentos.	Defunciones.	Cifras absolutas.		Cifras relativas (por ciento).	
		Mayores de 5 años.	Menores de 5 años.		
	A.	B.	C.	B.	C.
Tegucigalpa	1,274	733	541	[illegible]	43.08
Gracias	767	443	324	57.76	42.24
Choluteca	591	358	233	60.58	39.42
Olancho	736	437	[illegible]	59.38	40.62
El Paraíso	777	442	335	56.89	43.11
Copán	794	444	350	55.92	44.08
Santa Bárbara	676	387	289	57.24	42.76
Valle	456	304	152	66.67	[illegible]
La Paz	352	[illegible]	[illegible]	[illegible]	[illegible]
Ocotepeque	519	264	255	51.87	49.13
Intibucá	680	369	311	54.27	45.73
Comayagua	420	258	162	61.43	38.57
Cortés	671	383	288	57.07	42.93
Yoro	332	216	116	65.00	35.00
Atlántida	465	263	202	56.56	43.44
Colón	248	145	103	58.47	41.53
Islas de la Bahía	72	50	22	69.45	[illegible]
Total	9,830	5,689	4,141	57.87	42.13

Mortalidad absoluta y relativa.

	Cifras absolutas.		Cifras relativas (por ciento).	
	1912	1911	1912	1911
Tegucigalpa	1,274	1,524	14.97	18.31
Gracias	767	769	14.74	15.03
Choluteca	591	572	12.48	12.31
Olancho	736	326	16.31	18.71
El Paraíso	777	933	17.76	27.77
Copán	794	777	18.83	18.22
Santa Bárbara	676	734	16.44	18.33
Valle	456	436	14.38	14.63
La Paz	352	632	11.63	21.75
Ocotepeque	519	468	17.38	16.11
Intibucá	680	991	23.97	35.85
Comayagua	420	392	8.63	14.48
Cortés	671	564	27.48	23.45
Yoro	332	329	16.96	17.09
Atlántida	465	322	39.95	27.87
Colón	248	288	21.48	25.42
Islas de la Bahía	72	63	14.09	12.01
Total	9,830	10,620	17.00	18.76

Mortalidad comparada.

No. orden.	Países.	Años.	Por ciento.	No. orden.	Países.	Años.	Por ciento.
1	Chile	1910	31.00	10	Imperio Alemán	1910	17.1
2	Servia	1909	29.30	11	Honduras	1912	17.0
3	Rumanía	1910	25.2	12	Bélgica	1909	15.8
4	Hungría	1910	23.5	13	Gran Bretaña	1910	14.0
5	España	1910	23.3	14	Suecia	1910	14.0
6	Argentina	1909	22.2	15	Holanda	1910	13.6
7	Japón	1910	21.4	16	Noruega	1910	13.5
8	Italia	1910	19.6	17	Dinamarca	1910	12.9
9	Francia	1910	17.9				

Cuadro de las enfermedades conforme a la clasificación internacional, 1912—Resumen.

Enfermededas generales	1,226
Enfermedades del sistema nervioso	175
Enfermedades del aparato circulatorio	101
Enfermedades del aparato respiratorio	728
Enfermedades del aparato digestivo	1,052
Enfermedades del aparato génito-urinario y sus anexos	44
Estado puerperal	181
Enfermedades de la piel y del tejido celular	207
Primera infancia	226
Ancianidad	97
Desórdenes producidos por causas externas	399
Enfermedades no definidas enteramente	5,354
Total	9,830

Coeficientes de la nupcialidad en 1912.

Departamentos.	Coeficientes.	Departamentos.	Coeficientes.
Intibucá	12.48	Tegucigalpa	3.49
Islas de la Bahía	8.61	Valle	3.18
Comayagua	6.18	Yoro	3.16
Ocotepeque	5.05	El Paraíso	3.15
Santa Bárbara	4.45	Choluteca	3.04
Copán	4.24	Atlántida	3.00
Olancho	4.12	Cortés	2.29
Gracias	4.07	Colón	1.65
La Paz	3.86	En la República	4.24

Nupcialidad comparada.

Años.	Países.	Por ciento.	Años.	Países.	Por ciento.
1910	Gran Bretaña	14.3	1909	Suiza	7.5
1908	Japón	9.4	1910	España	7.1
1909	Servia	9.4	1910	Noruega	6.2
1910	Rumanía	9.2	1910	Dinamarca	7.3
1909	Bulgaria	9.1	1910	Suecia	6.0
1910	Rusia	7.8	1910	Holanda	7.2
1905	Francia	7.9	1907	Portugal	6.2
1910	Imperio Alemán	7.7	1909	Uruguay	6.0
1909	Bélgica	7.7	1908	Austria	7.6
1909	Italia	7.7	1909	Chile	5.8
1910	Hungría	8.6	1912	Honduras	4.24

Movimiento migratorio, 1912—Résumen comparativo.

	Año de 1911.	Año de 1912.	Diferencias.
Entradas	8,245	9,578	1,333
Salidas	6,140	9,268	3,128
Saldo	2,105	310	1,795

Cuadro general del movimiento marítimo habido en la República en 1912.

ENTRADAS.

Banderas.	Embarcaciones.	Tonelaje.	Tripulacion.	Pasajeros.
VAPORES.				
Noruega	499	363,930½	10,637	2,350
Inglesa	119	115,552	3,923	717
Alemana	22	59,943	1,333	37
Hondureña	79	53,044	1,771	246
Americana	64	107,146	4,391	420
Suma	783	699,615½	22,055	3,770
VELEROS.				
Inglesa	862	30,725	3,583	2,674
Hondureña	1,472	22,405½	3,474	3,046
Americana	74	4,716	456	49
Nicaraguense	31	1,165	94	22
Española	3	462	31	....
Mejicana	2	20	4	11
Guatemalteca	3	8	7	6
Suma	2,447	59,501½	7,649	5,808
Total	3,233	759,117	29,704	9,578

SALIDAS.

Banderas.	Embarcaciones.	Tonelaje.	Tripulacion.	Pasajeros.
VAPORES.				
Noruega	493	358,222½	10,943	1,867
Inglesa	116	112,487	3,813	575
Alemana	22	60,943	1,333	33
Hondureña	75	50,766	1,684	197
Americana	65	107,167	4,398	244
Suma	771	689,585½	22,169	2,916
VELEROS.				
Inglesa	853	29,548	3,360	2,720
Hondureña	1,514	22,535	3,432	3,507
Americana	71	4,541	430	73
Nicaraguense	26	950	79	40
Española	2	326	21	....
Mejicana	2	21	4	7
Guatemalteca	2	6	6	5
Suma	2,470	57,927	7,340	6,352
Total	3,241	747,512½	29,509	9,268

Exportación de productos por los puertos y departamentos de la República durante el año económico de 1912 a 1913.

PRODUCTOS ANIMALES.

Cueros de res	$359, 840. 18
Cuernos de res	200. 00
Colas de res	10. 00
Ganado asnal	735. 00
Ganado caballar macho	2, 640. 00
Ganado mular	6, 860. 00
Ganado vacuno macho	497, 863. 50
Pieles de cabra	1, 383. 50
Pieles de lagarto	777. 40
Pieles de tigre	15. 00
Pieles de venado	54, 647. 75
Plumas de garza	310. 00
	925, 282. 33

PRODUCTOS VEGETALES.

Bananos	3, 986, 090. 97
Bálsamo	501. 50
Café	146, 420. 05
Caucho	85, 856. 16
Cocos	451, 453. 98
Corozos	500. 00
Chicle	756. 00
Frijoles	20. 00
Liquidámbar	576. 50
Lonillas	106. 50
Madera de caoba	29, 645. 92
Madera de cedro espino	175. 00
Madera de cedro real	329. 17
Madera de construcción	754. 00
Madera de mora	4, 526. 00
Madera de San Juan	4, 690. 64
Plátano	1, 565. 00
Semillas de zacate	1, 000. 00
Sombreros de junco	4, 018. 00
Sombreros de palma	1, 132. 50
Tabaco en rama	29, 140. 00
Zarzaparrilla	46, 210. 67
	4, 795, 468. 56

PRODUCTOS MINERALES.

Broza mineral	15, 524. 57
Oro en bruto	70, 065. 00
Oro y plata en bruto	862, 949. 13
Oro y plata en cianuro	1, 162, 561. 37
Plata en bruto	32, 988. 00
Plata acuñada	69, 619. 50
	2, 213, 707. 57

DIVERSOS.

Equipajes	6, 250. 00
Libros impresos	50. 00
Mercaderías reembarcadas	11, 662. 27
	17, 962. 27
Total	7, 952, 420. 73

RESUMEN.

Valores por países de destino:	
Alemania	424, 366. 78
Belice	108, 045. 14
Costa Rica	1, 250. 00
Colombia	400. 00
Cuba	3, 780. 00
Chile	50. 00
Estados Unidos	6, 913, 706. 06
Francia	12, 519. 65
Guatemala	266, 185. 00
Italia	329. 10
Inglaterra	32, 450. 00
Jamaica	900. 00
Méjico	10, 265. 00
Nicaragua	20, 637. 00
Panamá	1, 805. 00
Perú	28, 990. 00
Salvador	126, 742. 00
Suma	7, 952, 420. 73
Valores por aduanas de exportación:	
Amapala	2, 495, 662. 53
Puerto Cortés	2, 616, 829. 56
La Ceiba	1, 882, 406. 52
Trujillo	138, 285. 76
Roatán	417, 125. 36
Comayagua	32, 054. 00
Copán	39, 545. 00
Choluteca	56, 725. 00
El Paraíso	13, 168. 00
Gracias	69, 640. 00
Intibucá	43, 195. 00
Ocotepeque	48, 190. 00
Olancho	27, 824. 00
Santa Bárbara	23, 990. 00
Tegucigalpa	31, 200. 00
Valle	16, 580. 00
Suma	7, 952, 420. 73

Detalles de la exportación y valor en plata.

Artículos.	Unidad.	Cantidad.	Valor principal.
Broza mineral	Libra	10, 254	$15, 524. 57
Bananos	Racimo	6, 246, 582	3, 986, 000. 97
Bálsamo	Libra	557	501. 50
Café	do	494, 603	146, 420. 05
Caucho	do	62, 208	85, 856. 16
Cocos	Fruto	9, 722, 953	451, 453. 98
Corozos	Libra	10, 109	500. 00
Cuernos de res	do	1, 024	200. 00
Cueros de res	do	950, 819	359, 840. 18
Colas de res	do	125	10. 00
Equipajes	do	6, 065	6, 250. 00
Frijoles	do	200	20. 00
Ganado asnal	Cabeza	15	735. 00
Ganado caballar	do	29	2, 640. 00
Ganado mular	do	91	6, 860. 00
Ganado vacuno macho	do	19, 017	497, 863. 50
Libros impresos	Libra	377	50. 00
Liquidambar	do	2, 785	576. 50
Lonilla (vegetal)	do	413	106. 50
Madera de caoba	Pie	327, 230	29, 645. 92
Madera de cedro espino	do	3, 682	175. 00
Madera de cedro real	do	10, 644	329. 17
Madera de construcción	do	15, 647	754. 00
Madera de mora	Tonelada	404	4, 526. 00
Madera de San Juan	Pie	117, 266	4, 690. 64
Mercaderias reexportadas	Libra	31, 288	11, 662. 27
Oro en pasta	do	211	70, 065. 00
Oro y plata en cianuro	do	121, 749	1, 162, 561. 37
Plata en bruto	do	1, 154	32, 988. 00
Plata acuñada			69, 619. 50
Pieles de cabra	Libra	2, 744	1, 383. 50
Pieles de lagarto	do	3, 814	777. 40
Pieles de tigre	do	28	15. 00
Pieles de venado	do	92, 307	54, 647. 75
Platanos	Fruto	86, 000	1, 565. 00
Plumas de garza	Libra	3	310. 00
Semilla de zacate	do	2, 009	1, 000. 00
Sombreros de junco	do	401	4, 018. 00
Sombreros de palma	do	1, 056	1, 132. 50
Tabaco en rama	do	83, 700	29, 140. 00
Zarzaparilla	do	125, 078	46, 210. 67
Total			7, 952, 420. 73

Resumen del valor de la importación general por paises de procedencia y puertos de registro.

Valor en oro.

Países de procedencia:	
Alemania	558, 327. 24
Austria-Hungría	91. 50
Bélgica	12, 417. 72
Costa Rica	205. 00
Cuba	1, 082. 47
China	1, 634. 49
Dinamarca	1, 150. 00
España	45, 857. 18
Estados Unidos	3, 463, 662. 07
El Salvador	3, 714. 80
Francia	148, 280. 32
Guatemala	60, 577. 65
Holanda	242. 71
Inglaterra y sus colonias	751, 651. 64
Italia	32, 842. 16
Japón	11, 800. 42
Países de procedencia:	
Méjico	5, 639. 37
Nicaragua	33, 282. 00
Panamá	180. 00
Portugal	40. 00
Suma	5, 132, 678. 74
Puertos de registro:	
Amapala	1, 679, 040. 96
Puerto Cortés	1, 839, 374. 66
La Ceiba	1, 418, 861. 83
Trujillo	81, 558. 39
Roatán	113, 842. 90
Suma	5, 132, 678. 74

THE STANDARDIZATION OF CENSUS AND COMMERCIAL STATISTICS IN THE AMERICAN REPUBLICS.

By S. N. D. NORTH,

Assistant Secretary and Statistician of the Carnegie Endowment for International Peace.

At the First Pan American Scientific Congress held in Santiago, in 1908–9, the present writer had the privilege of presenting a paper on the topic "Uniformity and cooperation in the census methods of the Republics of the American Continent."

The privilege now comes to renew the plea then made, and to emphasize the need of uniformity and cooperation in certain other fields of governmental administration, largely statistical, which are very vital in their bearing upon the future commercal relations of the American Republics.

Through the courtesy of the Pan American Union and the Census Office I am able to present the following record of the population censuses which have been taken in Central and South American countries:

CENTRAL AMERICAN REPUBLICS.

British Honduras....1871, 1881, 1891, 1901.
Costa Rica............1826, 1835, 1844, 1864, 1883, 1888, 1892, 1907, 1911. Census of Agriculture, 1905. Census of Commerce, 1907.
Guatemala............1880, 1893, 1900. Population evaluée. Industrial census, 1914.
Honduras..............1881, 1887, 1895, 1901, 1905, 1910.
Nicaragua.............No record of a census. Population estimated for 1883 and 1888. Census of Granada, 1906. Commercial census, 1910.
Panama (Republic)..1903. Population evaluée, 1911.
Panama Canal Zone..1908, 1912.
Salvador...............1878 (population estimated), 1892 (population estimated), 1901 (Levasseur), 1911 (population probable).

MISCELLANEOUS COUNTRIES.

British Guiana........1851, 1871 (Levasseur et Bodio), 1881 (Levasseur et Bodio), 1891 (in Commerce Library), 1901 (Levasseur et Bodio), 1911.
Cuba.....................1899, 1907; 1912 census planned, but no report.
Dominican Republic..1879 (estimated), 1888 (estimated). No census ever taken. Census ordered in 1913. No further report.
Grenada, W. I.........1891, 1901, 1911.
Haiti......................1887. Ecclesiastical census in 1903. No regular census ever taken.
Jamaica..................1844, 1861, 1871, 1881, 1891, 1911.
Mexico...................1842. Convocations expedida por el general en jefe del ejercito libertador Republicano, en ejercicio del supremo poder ejecutivo 1846. 1875, 1879, 1895, 1900, 1910; not complete. Mexico City, 1890. Monterey City, 1900.
Porto Rico.............1860, 1883, 1887 (with Spain), 1900, 1910.

SOUTH AMERICAN REPUBLICS.

Argentine Republic	1869, Primer censo de la República Argentina. 1895 (second census). 1912 (Territorios Nacionales only). Census to be taken in 1914. Nothing received to date. Special censuses: Educational census, 1883; agricultural and pastoral census of the national territories, 1905; agricultural and pastoral census, 1908; educational census, 1909; industrial census, 1909–10.
Bolivia	1831, 1835, 1845, 1854, 1882, 1900. Law passed authorizing census of 1912. Nothing received to date.
Brazil	1872 (first regular census), 1890, 1900. Work on a new census begun in 1910 and date fixed for 1911. Work stopped for lack of appropriation.
Chile	1835, 1843, 1854, 1865, 1875, 1885, 1895, 1907, 1910 (estimated).
Colombia	1825, 1835, 1843, 1851, 1870, 1912.
Ecuador	None ever taken. A census ordered in 1903 was not taken. Census of Quito, 1906.
Paraguay	1740, Jesuit count. 1873, 1887, 1899.
Peru	1876, 1896. Population evaluée. Special census: Educational census, 1902.
Uruguay	1852, 1860, 1900, 1908. A census was organized in 1912, but no report. Special census: Census of cattle, 1900.
Venezuela	1873, 1881, 1891, 1904. Population evaluée. A census ordered Dec. 31, 1910; no further report.

The Republic of Argentina has taken four censuses, in the years 1869, 1895, and 1905, and the last in 1912, the results of which are not yet available. Thus this great Republic has dislocated her census statistics, by departing from the decennial interval, after two precedents. Argentina possesses a fertile area of over a million square miles. It is considerably larger than the combined area of all the European nations at war with each other, Russia alone excepted. It requires imagination to measure her magnificent future. A periodical census is the only method by which an inventory of progress can be established for the guidance of her statesmen and people in solving the social and industrial problems which confront her.

Brazil took a census in 1890, another in 1900, and we can not doubt that her third decennial census will follow in 1920. Brazil has an area of 4,000,000 square miles—nearly a fourth larger than that of the continental United States, with a population about one-fourth of ours. Her resources are so immense in potential value that it is destined to a future growth in population and in every other way not less marvelous than that of the United States.

Chile, with an area of 291,500 square miles and a population of 3,500,000, has done more than any other American Republic, except the United States, to preserve a statistical barometer of her people and their progress. She has taken seven censuses on the decennial or quinquennial basis.

What has been said of the so-called A. B. C. Republics applies in varying degree to the other southern nations.

The table indicates that where new censuses have been taken since the Santiago Congress the great advantages which inhere in regularity of enumeration, either at 5 or 10 year intervals, have not been recognized. These advantages become increasingly important as nations grow older and the population becomes progressively larger and more varied in its elements. The regular periodicity of the United States census is one of its most important

features. It furnishes an exact measure of population growth in connection with growth in industry, in commerce, and in all the modern development commonly described as sociological. It has been secured by a mandatory provision of our Federal Constitution. In the centuries to come it will preserve for our citizens an exact photograph of our material growth from the founding of the Government, such as no other nation can ever have. But it is possible for every American Republic to obtain a similar record from the date at which it ordains that decennial censuses shall thereafter be taken.

In 1909 the Central American countries organized a plan for a joint census of these Republics, which was officially communicated to the United States Government, with the request that it nominate a census expert competent to act as the director. This was done and the nominee accepted. Differences and divisions among the Republics prevented the undertaking at that time. It is to be hoped that it was postponed, and not abandoned.

The difficulties facing any movement to secure such uniform census action among the Central and South American Republics are apparently insurmountable at present; but they can be overcome whenever an agreement can be reached by national commissions from all the countries, meeting in conferences somewhat similar to those of The Hague, for the purpose of agreement upon a uniform date, and upon uniformity in the half dozen leading questions of a schedule. Such an agreement would be of inestimable advantage not only to them, but to the rest of the world. The dream of an international census, such as is here in mind, persists and will continue to persist, among the statisticians of all the nations, however Utopian it may appear to-day.

I dwell upon these things because it is becoming more and more evident, as the science of government develops, and particularly the government of democracies under the representative system, that statistics are, or ought to be, and eventually must be, the foundation upon which it rests, both in legislation and in administration. All the overshadowing subjects of modern legislation, whether in autocratic or democratic countries, depend in their intelligent handling and ultimate solution upon the completeness and accuracy with which the facts have been statistically determined. We have no other safe guide by which to direct the concensus of public opinion and to measure the degree and intensity of that opinion—its waves and curves of advancement, or recession, or culmination.

Our Federal census has been the most useful undertaking of the Government in that it has given us a progressive record of material and sociological development covering the 139 years of our national existence. Central and South America have a future no less certain and remarkable than that revealed in our own history. Their Republics are upon the threshold of their national existence. The world wants to know all about them, and they need to know all about themselves.

The United States stands ready to render practical and effective service in making possible a uniform presentation and classification of census results in all the Republics of the continent.

The census is only one of many fields in which the science of statistics has become both the measure and the instrumentality of progress in national life. In a very definite sense statistics are the basis of commerce. Every invoice of goods passing from one country to another takes its place in the tables which measure the quantity, the value, and the character of international commerce, and determine the degree and detail of its constantly shifting nature.

It is of primary importance that these commercial data shall be compiled upon identical lines in all the American Republics, so that they all shall mean the same thing and all be comparable with each other. Everywhere to-day an

absence of uniformity in classification, in terminology, and in units of measurement is a serious handicap in the growth of our international trade. It is a handicap to which little attention has been paid in the schemes and plans so abundant for the promotion of this trade; and yet the need for reform is as great in this field as in any other and more important now than ever before.

Notwithstanding the demoralization in shipping facilities, there has been a net increase in our imports from South America from $217,734,629 in 1913 to $222,677,075 in 1914, and to $261,489,963 in the fiscal year ending June 30, 1915. In 1900 they were valued at $93,666,764. They have nearly trebled in 15 years. They are destined to increase far more rapidly in the immediate future. The trend of development in our national industries makes us dependent upon imports of raw materials and certain other commodities which we can obtain to best advantage from our southern neighbors. We need the wools and hides of Argentina, Brazil, and Uruguay; the rubber of Bolivia; the coffee of Brazil and Venezuela; the cocoa of Ecuador; the tin and other metals of Bolivia; the nitrates of Chile; the cane sugar and flaxseed of other countries; the fruits of Central America. To whatever degree our exports to the south may increase, it will be long before they equal in value our imports from the south.

The need for simplifying and unifying the statistics of this great commerce, still in its infancy, is so chiefly a work of intergovernmental cooperation as to be beyond the reach of private individuals or private organizations of business men. It requires the official initiative and supervision of the Governments themselves; and one of the aims of this Congress should be to bring this fact home to the Governments these delegates represent, thus reinforcing the recommendations of the First Pan American Financial Conference, held in Washington last May.

The admirable paper of Mr. Halstead, of the United States Treasury, presented to this Congress, has pointed out the absurd, archaic, and conflicting port and customs regulations which impede and complicate commerce between the American Republics. I shall briefly refer to certain other related anomalies, which are now being emphasized by the European war.

We are in the midst of times which are deciding the future destinies not only of the nations of Europe, but in large measure of America also. Seventeen months of war have compelled a reversal of the trade and financial currents of the world. Europe has passed from a gold to a credit basis, and the United States has become a lending instead of a borrowing nation. Always hitherto a debtor country, we have suddenly become the banker for the rest of the world. The balance of trade against us has been converted into a balance in our favor which exceeded a billion dollars in the year just ending. It is such a tremendous reversal of previous conditions that it is impossible to grasp its full significance.

In close connection has come a demoralization in international exchange without precedent in history. The draft on London, for generations the accepted medium of international payments, has become of strangely uncertain value. The trade balances against Great Britain, resulting from her enormous purchases in the world's markets, and particularly in the United States, have caused the London bill to decline from the intrinsic value of the pound sterling, $4.8665, to as low as $4.50 in New York, and at last accounts it had only been raised to about $4.65 by the negotiation of a public loan of $500,000,000 plus hundreds of millions of private credits in the States. The French franc, the German mark, and the Russian ruble have fallen even lower. In view of the incredible debts which the nations at war are piling up for coming generations to pay and of the complete dislocation of their foreign trade

it is difficult to believe that the pound sterling can immediately be stabilized for exchange purposes upon the close of the war. In the meanwhile New York City has become for the time being the world money center.

A great many things will have to be done before New York can permanently establish such a position. Among other things it must first become a great world's market for goods, a great entrepôt of world's trade, a center for world's shipping, and we must educate our people to buy foreign securities.

When the war began the United States was in the very act of reorganizing its national banking system. Up to that time it had consisted of a loosely connected aggregation of individual banks and lacked cohesion and strength. Unfortunately, the new system was not in working order, and the resources of the old system failed, as they had failed upon other occasions of stress, through inability to effectively use the really abundant gold stock of the country. As a result of this inefficiency in the banking organization the dollar for a time was depreciated in the exchanges; but this situation was soon corrected by the inherent strength of the country's position as a great producer of staples wanted in international trade. Since then the Federal Reserve System has been fully established with resources which, backed by the productive powers of the country, are believed to be ample to maintain gold payments under all circumstances.

The gains of capital which the United States is now making, in connection with the strength of its position as a great producer of food and raw materials, and with the enormous capacity of its highly developed industrial organization, and its abundant supply of liquid wealth, justify the prevalent belief that it will henceforth play a much larger part in the world's commerce and in financing the development of other countries.

The commercial and financial future of both North and South America are vitally affected by these conditions. The establishment of North American branch banks in South American financial centers makes it possible for the business men of both North and South America to grasp hands in the promotion of mutual interests, in accordance with what has seemed to be the foreordained destiny of a continent so widely separated from Europe, Asia, and Africa, and so recently made one by the completion of the Panama Canal. The industrial development of the Southern Republics has depended heretofore upon European capital, as was also the case with the United States until recently. The United States is now in a position to act as banker for all the Americas and large plans are now being made for the performance of this new duty. The situation calls for many radical changes in the methods and machinery of trade.

For the purposes of international exchange the dollar has one certain and peculiar advantage over the pound sterling—a purely arbitrary and wholly awkward monetary unit. The American dollar is as perfect an adaptation of the decimal system, in its subdivisions and multiples, as it is possible to frame. It is an ideal monetary unit for the world. Its substitution for the pound sterling would greatly facilitate commercial exchanges between North and South America.

The Bolivian delegation to the financial congress reported that with the growing demand for American dollars to make settlement of trade balances, there is every reason why they should be made legal tender for all purposes. The Paraguay delegation reported that it believed that "the adoption of a uniform money standard for all the American Republics would result in stabilizing the currency of the different countries and facilitating international banking and commercial transactions." The Uruguay delegation passed a resolution urging the adoption by the American Republics of an international monetary unit. The American dollar has been made by circumstances the obvious unit.

The Ecuador delegation formally recommended a Pan American monetary union. If there can be a Latin monetary union and a Scandinavian monetary union, why should there not be a Pan American monetary union?

The probable acceptance of the dollar credit as the basis of Pan American international exchange suggests the desirability of a concerted movement for the unification of the monetary systems of North, Central, and South America. The quarterly statement of the United States Treasury of the value of foreign coins in our United States money brings regularly to public attention the inconsistencies and discrepancies of the existing monetary systems of Latin America.

	Standard.	Name of coin.	Value in United States money.
Argentina[1]	Gold (1881)	Peso	0.9648
Bolivia[2]	Gold (1908)	Boliviano	.3893
Brazil[3]	Gold (1907)	Milreis	.5462
Costa Rica	Gold (1896)	Colon	.4653
Guatemala[4]			
Honduras[5]	Silver	Peso	.3537
Salvador[6]			
Chile[7]	Gold	Peso	.3650
Colombia[8]	Gold (1903)	do	1.0000
Cuba[9]			
Equador	Gold (1898)	Sucre	.4867
Haiti[10]	Gold	Gourde	.9647
Mexico[11]	do	Peso	.4985
Nicaragua[12]			
Panama	Gold	Balboa	1.0000
Paraguay[13]	Silver	Peso	.3537
Peru	Gold	Libra	4.8665
Santo Domingo	do	Dollar	1.0000
Uruguay	do	Peso	1.0342
Venezuela	do	Bolivar	.1930

[1] Currency: Depreciated paper, convertible at 44 per cent of face value.
[2] 12½ bolivianos equal 1 pound sterling.
[3] Currency: Government paper; exchange rate about 25 cents to the milreis.
[4] Currency: Inconvertible paper; exchange rate about 40 pesos (equals) $1.
[5] Currency: Bank notes.
[6] Currency: Convertible into silver on demand.
[7] Currency: Inconvertible paper; exchange rate, approximately $0.14.
[8] Currency: Inconvertible paper; exchange rate, approximately $105 paper to $1 gold.
[9] No national currency; United States notes and coin circulate; also French gold and bank notes, and Spanish gold, silver, and copper.
[10] Currency: Inconvertible paper; exchange rate, approximately $0.16.
[11] Mexican exchange rate violently fluctuating; approximately $0.15.
[12] Now has national coinage system.
[13] Currency: Depreciated paper; exchange rate 1,550 per cent.

An effort toward the unification of all American monetary standards is desirable, not only to facilitate their commerce with the world, but among themselves. The report of the Salvador delegates to the financial conference of last May declares:

> In the majority of the Latin American nations one of the most serious problems that must be solved if their economic conditions are to be improved is that of currency. The diversity of intrinsic and face values, as well as the multiplicity of systems, makes commercial transactions, even between neighboring countries, almost impossible, except by taking as a standard the currency of the United States or that of one of the great European nations. * * * We believe that the adoption of a single monetary system, established on the uniform basis of a single gold standard coin, is one of the greatest steps for the drawing together of the 21 American Republics.

While most of the southern monetary systems are built up on the decimal plan, at least in their subsidiary coinage and paper money, they bear little relationship to each other. There are as many as seven pesos, only two of which

are quoted in the quarterly statements of our Treasury Department as of identical value in their United States money equivalent. Three of them are adjusted to the British pound sterling and two to the Portuguese standard. A comparison of the different values makes it plain that a very slight increase of value in some and a slight decrease in others would standardize the whole series, not only of pesos, but milreis, sucres, gourdes, and balboas, except as they might be affected at times by fluctuations in the exchange value of one or another of them.

Within the last two years Nicaragua has reorganized her monetary system in line with the suggestions of this paper, making her monetary unit, the cordoba, the equivalent of our gold dollar, and the Government is seeking to maintain it on the gold basis.

During the year 1915 the Republic of Cuba has begun its new coinage system. Its standard is a gold unit, which is the exact equivalent of our own gold dollar.

What other Latin American nations have done all can do. As long ago as 1858 the Government of Canada adopted the decimal monetary system, with the United States gold dollar as the unit of value. Since 1905 all the coinage of Mexico has been on the decimal basis, with the United States dollar as its unit of value. Thus every country of the North American Continent now has a uniform monetary system based upon the United States unit. This monetary standardization has come about by a natural evolution, extending over a period of more than half a century. Its existence creates an overwhelming reason why the unification of the Central and South American monetary systems should be attempted on the same basis.

I must not be understood as discussing the difficult and delicate subject of the establishment of the gold basis in those Republics where it does not now exist. That is a matter which each country must determine for itself in keeping with its own peculiar conditions and resources. But I may add that at the Pan American Financial Conference the fact was generally recognized that conditions springing out of the European war, which were already beginning to affect the trade of South America in May last, create the most favorable opportunity that has yet arisen for the standardization of the South and Central American currencies on the gold basis.

The suggestion for a unification of monetary standards will appeal more strongly to the business men of South America, because it is the logical complement of the metric system of weights and measures, which is recognized in every Latin American Republic, and is the sole legal standard in most of them.[1]

So far as weights and measures are concerned, the United States must humbly give homage to her southern neighbors. They may well say that we have no business to complain of their monetary systems, while neglecting to reform our prehistoric system of weights and measures, which mean nothing to them.

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[1] The metric system of weights and measures has been adopted as the sole legal standard by Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Honduras, Mexico, Nicaragua, Peru, Salvador, and Uruguay. Its use is legal in Bolivia, Ecuador, Paraguay, and Venezuela, and it is the sole legal system of Guatemala. It is used in Panama, Haiti, and the Dominican Republic. Customs duties in all Latin American countries are levied by metric weights and measures, with the exception of Haiti, and the customs tariff of Panama is partly based thereon. Virtually it may be said to have force in Haitian customs collections also, as the tariff pound is equivalent to 500 grams.

Railway distances are always indicated in kilometers throughout the Latin American Republics.

Commercial statistics, when weights and measures are a factor in their return by Latin American countries, are given by metric system in all except Haiti.

With a perfect decimal monetary unit we cling to the clumsy, absurd standards of antiquity in all the business transactions in which money and exchange have superceded barter. We still have our three sets of weights, our two different gallons, and our many dissimilar bushels, all unrelated to each other, or to the units of length, and all unrelated to the corresponding units of all other countries. It is impossible to exaggerate the difficulties and delays which result from this anachronism in international trade. They are as obvious as they are unnecessary. They are simply relics of the barbaric age from which we inherited them.

In the early times each separate locality and every different industry had its own system of weights and measures, which crudely served local needs under primitive conditions when barter was chiefly neighborhood. As trade grew beyond locality, as it extended inland and across seas and mountains, this confusion of standards and nomenclature became intolerable. Gradually there came a group of scientists who dedicated their lives to the joint devising of a system which should serve all the world equally well by the substitution of automatically convertible systems and symbols. After many decades of research, of agitation, of indefatigable labor the metric system emerged toward the end of the eighteenth century—the greatest achievement of mathematical science for the promotion of commerce. The absolute simplicity and scientific perfection of the metric system have carried it with marvelous rapidity around the world. It is in legalized use in more than 40 countries, and in obligatory use in 34. Nothing stands in the way of its universal application save ignorance, habit and a narrow conservatism which resembles fetish worship.

There is a suggestion of Anglo-Saxon stubbornness and individualism in the refusal of Great Britain and the United States to take full advantage of the modern methods of metrology. One country with the world's greatest commerce, the other her near rival in that commerce, they tolerate this handicap chiefly through the power of inertia and the iron rule of tradition.

But marked and gratifying progress is apparent in this country. In 1866 the United States Congress legalized the metric system for all purposes. (Revised Statutes, sec. 3569.) All the States have been supplied by the Federal Government with copies of the metric standards. Foreign postage rates are fixed in metric units. (Revised Statutes, sec. 3880.) Our subsidiary silver coinage is based on specific metric weights. (Revised Statutes, sec. 3513.) In 1894 the Congress adopted the international electrical units based on the metric system as the "legal units of electrical measures in the United States." (Revised Statutes, Sup. Vol. II, ch. 131.) By proclamation of 1899 the metric system was made obligatory in our new Province of Rorto Rico, and by the act of 1901 it was made the legal system of weights and measures in the Philippine Islands. In both these dependencies it is the standard; in the Nation itself it still has to force its way by slow and painful steps. Our customhouses have long been compelled to use it, and our schools and technical institutions are teaching and practicing it; many of our great manufacturing establishments have long used it; and ultimately it will make its way into general every-day use in business and commercial transactions.

It may be admitted that it will take time, just as many of the South American Republics have not yet fully overcome the inherited use of the old Spanish standards, both in money, in weights, and in measures. In the same way it will take concerted effort on the part of the Governments of the Central and South American Republics to accustom their people to a change in monetary standards. The habit of using certain inherited standards of money, weights, and measures is almost as persistent as that of language itself, with all its local

dialects and corruptions. But the failure to supply government standards and to enact the necessary laws has much to do with it.

Recalling the long years of agitation which preceded the establishment of the metric system elsewhere, why should either South America or North America be affrighted over the difficulties of reforming monetary standards on the one hand, or the standards of weights and measures on the other? Let it always be borne in mind that standardization is the greatest discovery of modern times for the material benefit of mankind.

In the face of every discouragement let us not forget that the American Republics are still very young. All of them are well on in the second century of national independence; but all of them are still infants in comparison with the civilizations of Europe and the East; and we are building for those who are to follow us in unnumbered centuries to come. We are so absorbed in the daily struggles and incidents of life that we are prone to forget the future, except in its immediate bearing upon our own affairs.

There are some things in which the North and South Americans can never be alike. Our several languages, for example, are determined for all time. But there are many more things in which we are and ought to be alike, and increasingly alike. Our standards of business honor are the same; our methods in business transactions ought also to be the same. We can, by systematic effort, learn to think in the same terms of money, of weights and of measures, and thus more closely assimilate our methods as intercourse and business association grow closer. The more alike they become, the more they are standardized along lines that make for simplicity, for accuracy, and for reform in any existing abuses, the better for both of us.

The tragedy of Europe has brought financial losses and business disturbances as well as sorrow and horror to the Americas. It has also brought opportunities and duties. It has brought the south and the north more closely together, both in commerce and in sympathy. Let us hope that the Second Pan American Scientific Congress, fully and solemnly and sorrowfully cognizant of the significance of the world upheaval, will plan wisely for the future of both halves of the Western Hemisphere.

INVESTMENTS OF CAPITAL IN BRAZIL.

By H. C. DE MARTINS PINHEIRO,
Consul General of Brazil in New York City.

The above heading suggests the vastness of a complete study of the subject. We will, however, limit ourselves to a rapid survey of its principal points, restricted as we are by time and space. We must recall at the beginning some facts which, in spite of being commonly known, should be kept in mind since they will affect the following reasoning:

Brazil, the largest of the Republics of the continent, has a population of 25,000,000 inhabitants, which, if diffused throughout its enormous territory, would result in an average density of eight persons per square mile. Her extensive coast line of about 4,000 miles on the Atlantic, however, greatly encourages the concentration of the population in an area of about 1,000,000 square miles (less than one-third of the total territory), due to the fact that the expansion logically follows the directrix E. W. from the seas to the interior. As a result of the above fact, the productive part of Brazil is at present limited to a zone which follows the coast line and which is relatively narrow, the maximum width not exceeding 600 miles and rarely attaining the same.

This brief geographical résumé of that country is suggestive of the many and great opportunities which, in the near future, humanity may profit from Brazil's productive capacity, when this narrow continental strip is enlarged to the remote boundaries of the W.

The capital invested for financing enterprises in Brazil up to the present day has been employed in the following way:

(*a*) In agriculture, which, on account of being the foundation of Brazil's wealth, has absorbed up to now capital amounting to about $750,000,000, 60 per cent of which is used in the production of coffee.

(*b*) In manufactures, which up to the present day has consumed more than $150,000,000.

(*c*) In means of communication—territorial, maritime, or fluvial—about $470,000,000 has been employed.

(*d*)[1] In mining, which industry has been little exploited in a few districts of the States of Minas Geraes, Bahia, Santa Catharina, and Rio Grande do Sul.

(*e*) In public service, where more than $150,000,000 have been spent.

This total of $1,500,000,000 invested in the Brazilian activities is formed by—

(*a*) Capital of the country to the proportion of 60 per cent, about $1,000,000,000.

(*b*) Foreign capital, amounting to nearly $500,000,000.

National capital is employed mostly in agriculture, manufacturing, and public services, while foreign capital is more frequently invested in means of communication and in mining.

The questions which logically follow the above study are: Should this régime continue? Are these really the best fields for foreign capital in Brazil?

We do not think so. The present opportunity offered by Brazil is of a different nature, broader and more remunerative. This lies in the utilization of her very rich soil, and the best way of utilizing it is by transforming the country into the greatest producer of beef in the world.

The present great European conflagration has increased extensively our knowledge in the field of political economy. It brought abruptly to the world's attention a scale of values in which naturally were grouped the various products consumed by the world, establishing the economic hierarchy of each other in the face of the rigid law of supply and demand. Of all the products of human industries the most indispensable are those relating to food, and among these the one product that becomes more and more scarce, increasing progressively in price, is without doubt meat. Nevertheless, with the exception of Argentina, every year shows rapid decreases in the meat production of the leading countries engaged in this industry, as, for example, in the United States, Canada, Australia, and New Zealand.

In the United States it is enough to examine the figures relative to the export of meats for the last eight years, and exports falling from 127,701 tons in 1907 to 4,457 tons in 1914; in Canada the decrease was from 1,309 tons in 1906 to 442 tons in 1910, almost nothing being exported in the following years; in Australia it remains stationary at an annual rate of 25,000 tons; the same is the case in New Zealand, with an annual average exportation of 20,000 tons. In this country the decline can be judged by the following table, which gives the results for the last eight years of exports:

[1] Due to lack of available data we are unable to estimate the amount expended in the installations of plants—at the present producing very little—for iron, diamonds, gold, and coal.

United States.—Exports of meats (cattle, swine, and sheep):

	Tons.		Tons.
1907	127,701	1911	22,551
1908	91,203	1912	13,710
1909	55,746	1913	10,231
1910	34,336	1914	4,457

One country alone is filling the gap caused by the considerable fall in the exports of the United States, Australia, Canada, and New Zealand. It is the Argentine Republic, whose increasing exports are shown in the following table:

Meat exportation (cattle, swine, and sheep).

	Tons.		Tons.
1907	138,222	1911	267,715
1908	180,814	1912	280,064
1909	210,657	1913	290,176
1910	253,708	1914	344,247

An increase of 150 per cent in seven years, or 21.5 per cent per year.

If it were not for the enormous expansion which Argentina has given to this absolutely necessary industry, taking charge of supplying meat to the world, the present conditions would be alarming because of the scarcity of the principal food of the human race.

Will that country be able to continue to increase the development of the last eight years? It is not plausible, considering the almost total exploitation of the territorial area of the same, and also the increasing extent of the agricultural production of corn, wheat, and fodder. It is enough to mention the fact that in 1910 Argentina raised corn on 10,000,000 acres, and this number increases yearly from 8 to 9 per cent. The nation exports 4,500,000 tons of that product—four times as much as the United States—and the increase in the consumption follows in the same proportion.

In contrast to the above, Brazil has almost immeasurable fields for the cattle-raising industry, covered with forage exceptionally rich in food value, of excellent and abounding pastures, good water, and free lands. At the present moment it is the earnest desire of those directing the destinies of that country to encourage and foster to the maximum all initiatives to this end. Already there exists the first great American enterprise (near the city of São Paulo) for the exportation of meat. Here is the best opportunity to invest considerable capital in the most legitimate fountain of the country's wealth, for the development of which industry nothing is lacking but the encouragement of the initiative already begun. All details relative to the manner of proceeding along these lines will be gladly furnished by this consulate general or by the department of agriculture of Brazilian States. Any capital so employed is bound to have a wonderful return—more so than in any other sphere of activity.

PERU'S FINANCIAL PROBLEM.

By OSGOOD HARDY,

Assistant in Latin American History in Yale University.

During the last two months Peru has been a target for criticism by many of our newspapers and trade journals because of its new mineral export tax. These have been so bitter that it may seem worth while to consider some of the events which have contributed to a state of affairs which should cause

the passage of an act which could be labeled by a sober mining journal as "killing the goose which laid the golden egg."

Two years ago, with the completion of the Panama Canal in sight, and with the businesslike administration of President Billinghurst still in control, Peru's financial prospects were considered fairly bright. But in 1914 things changed for the worse, and for the past two years Peru has been struggling to get on her feet again. In February of last year occurred at Lima the coup d'etat which terminated the Presidency of Señor Billinghurst and brought in a new government, which was practically a military dictatorship, under the provisional rule of Gen. Benavides. For some months Congress was in a state of turmoil and its attempts to rule the country were rendered abortive by the intrigues of the various parties struggling for control.

In the midst of this came the European war. A moratorium was declared at once, and later continued to June, 1915. It became impossible to meet the service of a loan made to the Government just previous to the war, and its amortization was postponed until the reestablishment of peace in Europe. The presence of German commerce raiders on the West Coast for several months paralyzed all shipping and practically eliminated the large European markets for most of Peru's raw products. In an attempt to remedy the scarcity of circulating medium which had come about earlier in the year, paper money had been introduced. It rapidly depreciated, and this, together with the continued moratoria, restricted very greatly all credit operations. Gold was driven out of circulation, although the Peruvian pound circulated in normal times on a par with the pound sterling. In November something like a ministerial crisis occurred, when the Finance Minister resigned. A conference of leading bankers was held, a premium on gold was established, and a supreme decree was issued on the third of the month prohibiting the changing of bank notes for gold, and placing a heavy penalty on such transactions.

This had a good effect and toward the end of the year business, which had fallen off 50 per cent, began to revive. Notwithstanding the extraordinary circumstances, created largely as a result of the war, a good demand sprang up for most of the Peruvian articles of export at relatively high and satisfactory prices. The export trade in most lines fortunately did not depend on the closed European markets, and where it was so dependent alternative markets offered themselves because of the very cutting off of European shipments. Of the eight principal exports of Peru cotton alone suffered severely for want of a market. Copper goes chiefly to the United States from Peru. It continued its normal course and by the beginning of 1915 the mines were running at about normal. Sugar usually went to Liverpool, but now that the German beet sugar shipments to Chile were shut off it was deflected southwards.

At the beginning of 1915 the merchants of Peru with European business connections began to face an extraordinary situation as regards receiving their usual quantities of European exports, both of manufactured articles and food products. Many of them had thought the war would not last long and consequently made no special effort to replenish their stocks or provide for American credit until toward the end of 1914 when the situation was realized. They found they would have to depend almost entirely on the United States and Great Britain, and largely on the former country for many articles and products hitherto supplied from continental Europe. Moreover, the great risk attendant upon importing direct from Europe at that time, together with the excessive freight rates and scarcity of ships, had the effect of directing their purchases almost entirely to the United States. In many cases this has had

very good results and some of the Peruvian importers who hitherto had confined their purchases almost entirely to the European market have come to realize the enormity of the field of American manufactures, not only of raw and food products, but of the finer grades of manufactured textiles, and a large variety of articles that previously were imported entirely from European countries. On the other hand others more loyal to the markets of the mother countries have been content to go with depleted stocks, preferring to wait until the end of the war shall make possible the resumption of the European relations now interrupted. In some cases this is due to a feeling that the sudden interest of the American exporter in South American trade is due to the curtailing of his regular markets and that with the return of peace he will give up as suddenly his newly created Latin American business affiliations. In one case a prominent Italian merchant in the interior of Peru, reputed to be worth half a million dollars and who had done business with American companies for some 20 years, became so enraged at the pressure brought to bear on him for cash payments during the financial crisis that he broke off all his old American relations and swore never again to do any business with or handle the goods of an American firm.

Although business continued to become more normal in the closing months of 1914 and the early part of 1915, the Government continued to face grave difficulties. The paper money which had been put forth was received with great reluctance by the population. The bills being in half and 1 pound denominations were too large for ordinary purchases. They soon began to depreciate in value, and in a short time a large percentage of the community was hoarding gold and silver to such an extent that merchants were known to refuse to make a sale involving the changing of a half-pound note unless the purchase was within a few cents of that amount. Although the monetary system of the country is based on a gold standard, gold coin was soon rarely seen in circulation, and by May of 1915 could be purchased only at a premium, the rate being from 13 per cent upward. This tendency had received a further impetus from the action of the Government in issuing a decree during the latter part of 1914 prohibiting the exportation of gold coin from the country and limiting the amount of gold which departing travelers could take with them.

In addition to the difficulties caused by the depreciation of the currency during the first part of the year the Government was compelled to face a constantly increasing reduction in customs revenues. Although exports had only slightly decreased imports had done so very materially, with the result that at the end of the first six months of this year customs receipts at Callao, the foremost port of the country, had diminished to the amount of Lp. 804,000, which is only 60 per cent of their previous figure.

Accordingly the situation which had to be met by the new Government which went into office in August of 1915 was extremely difficult. The finances of the country were in the worst shape imaginable, with a deficit from the year before and one in prospect for the coming year. The customs revenues were decreasing, the currency had depreciated, and it was impossible to secure any foreign loans excepting at very high rates of interest—so high, in fact, as to be prohibitive. Nothing daunted, the Government resolutely took the matter in hand, and in October the minister of finance submitted his estimate of the revenues and expenditures of the Government for the year of 1916, calculating the total revenues of the Republic at $p. 13,076,042 and the expenditures at $p. 13,416,619, showing an apparent deficit of $p. 337,577. The reduction in the appropriations for the departments of war, finance, interior, and justice indicate that the president's program of retrenchment in national expenditures is

being put into effect, there being a decrease in the appropriations for these departments in comparison with the previous year of $p. 1,056,816.

At the time the estimate was announced it was thought that the apparent deficit for 1916 could be offset by three new forms of taxation—(1) an increase of the fees of Peruvian consular officers, (2) an aditional surtax imposed at the customhouses of Callao and Mollendo on all importations for national consumption, and (3) a tax of 10 per cent on certain articles now imported free of duty. The continued decrease in import duties finally convinced the Government that still further steps would have to be taken. Accordingly, on November 14 a mineral export tax, including also petroleum exports as well as minerals, was promulgated. This imposes a sliding scale tax, varying somewhat with the price of the material exported in the London and New York markets, and is so heavy that it is claimed by the mining corporations that most of the profits will be eaten up by the tax, while the oil companies complain that their profits will be seriously reduced. It was bitterly attacked during its passage through Congress; but, as most of the mines and oil fields are owned by foreign investors, these attacks did little good. Even with the £200,000 derived from this tax, and the economies to be effected in administrative expenditure, the remedies are stated to be inadequate to the situation, and it is possible that some expedient beyond export taxes will be called upon. This proposed expedient is a 10 per cent import tax on all machinery, tools, and materials which have hitherto enjoyed free importation.

These two provisions have come in for some hard criticisms, both in Peru and abroad. Notwithstanding the fact that in the face of a financial situation of much urgency the Executive has been compelled to consider and indorse extreme measures to revitalize its national exchequer, it is predicted by American newspapers and financial journals that in placing a tax upon exports the Republic is entering upon a dangerous course, whose practical effect will tend not only to retard the material progress of the country, but will counteract some of the commercial progress which has been accomplished of late years, largely with the help of foreign capital, which will now consequently be discouraged from entering Peru. The 10 per cent import tax will affect almost every industry of importance throughout the Republic, and will remove, so it is claimed, at one sweep all the advantages which industrial development in Peru has hitherto enjoyed.

The provision that the mineral export tax is to be payable by exporters in drafts on London and New York was made, so say its exponents, for the purpose of bringing a greater amount of foreign drafts into the Peruvian exchange market, thus forcing down the price of exchange and strengthening the position of Peruvian currency. Exporters will draw drafts against shipments and this will bring additional money into the market in the form of drafts. Opponents of the measure claim, on the other hand, that this measure is like putting the cart before the horse. Every draft against a shipment or drawn in any form whatever increases the demand upon the exchange market, and every increased demand sends exchange higher. In the meantime the very fact that the Government is collecting a portion of its revenues in sterling will, it is feared, have a bad effect on Peruvian currency, for if the exchange situation is so serious that the Government must resort to fuerza mayor to secure foreign drafts, depreciation is said to be the only prospect in view for Peruvian paper currency.

However, the critics of the Government's financial policy do not attempt to point out in what other ways the necessary funds to carry on the administration are to be raised. Loans on any effective scale appear to be practically

impossible, and hand to mouth borrowings from the banks do not alleviate but rather intensify the financial difficulties. In fact the Government deserves great sympathy in its dire financial extremities, and it is obvious that it can not proceed very far without treading upon sensitive corns.

Thus it seems that financially Peru is at present in a rather bad way. Internal dissensions, together with the European war, have placed her in a difficult financial situation. But with all the gloom, a number of bright spots can be found. In the first place, business conditions are improving rapidly, and although the volume of trade has not reached normal, the improvement is so great as to make the normalization nor far distant. In the second place, the new President, who has already proved his capabilities in a previous administration, has the respect and confidence of the entire populace, so that the political disturbances of last year are not likely to occur again. In the third place, the new Government, as has been shown, is living up to its promises in the reduction of national expenditures. Fourth, the gravity of the difficulties is realized, and actions are being governed accordingly. The topic of greatest interest in Peru to-day is the financial situation, and all parties and factions are combined in making every effort to bring about its solution. Best of all, this effort is taking the form of careful, well-planned endeavor, rather than wild emergency measures. This is shown by the fact that although silver soles are so scarce as to really hinder trade, an attempt to provide for the reissue of Lp. 500,000 of £5 and £10 notes in denominations of 1 and 2 soles was a complete failure, owing to the fear that the paper soles might drive out the silver coins.

Throughout the debate on the question in the senate the galleries were crowded and rarely has public interest been so aroused as it has in this case. "A burnt child dreads the fire" and Peru's experience with paper money in the past has been so unfortunate and disastrous that no mere popular demand for a more convenient currency could force Peru's financiers into taking a step which would not be for the future welfare. Finally, when we consider the great natural resources of Peru, we realize that, severe as are the difficulties now besetting her financial pathway, it is only a matter of time before they will be solved. The wealth of her mineral deposits, her undeveloped water power, and her vast untouched montaña are too great to permit of the nation's becoming bankrupt. It is unfortunate in view of her great need for further investment of foreign capital that she was forced to adopt tax measures which have been viewed with such hostility. But, however, under existing world financial circumstances, outside capital is not very likely to come forward, and as professedly the tax is of a temporary character, although the Government has rejected definite compromises to this effect, it expresses an underlying hope that it may be removed in more propitious times, when capital is liberated from fears and restrictions pertaining to the universal upheaval now in progress. At any rate, a solvent Government is essential to peaceful and constitutional rule, and the aim of all concerned in the ultimate prosperity of the Republic should be to restore something like financial stability in the administration.

Thus we see that as a result of political difficulties inside the country itself, and the extraordinary financial conditions existant throughout the world as a result of the great war, the present Government of Peru is facing a very hard problem. In its dire necessity it has had to resort to measures which are without doubt somewhat severe and impose heavy burdens on the industries affected. But, however, these promise to be but temporary, and once the Government succeeds in getting on its feet, the sound financial methods which are now characterizing its exertions will surely remove any cause for complaint against the justness of the tax system. Accordingly, in view of the difficulties

which the present Peruvian Government has had to face, and the intelligent efforts which it is making to overcome them, it would seem only in keeping with the true spirit of Pan Americanism to withhold criticism until the final achievements of the present administration can be seen.

PROBLEMA DEL CAMBIO INTERNACIONAL Y MEDIOS MÁS ADECUADOS PARA ESTABLECER UN CAMBIO DIRECTO ENTRE LOS PAÍSES DEL CONTINENTE AMERICANO.

Por el BARÓN DE FRANZENSTEIN,

Director de la "Revista Económica" de Honduras.

Ya en los últimos años del pasado siglo, en cuya época anunciaban los mercados monetarios mundiales la primera fuerte desvalorización de plata, por motivos hartos conocidos, Honduras a semejanza de otros países monometalistas plata, vió llegar a condiciones de inferioridad el peso hondureño, en frente de las monedas de otros países de sistema monometálico oro, o bimetálico de base oro. Per este motivo, principalmente, la Primera Conferencia Centroamericana que se celebró por vez primera en Tegucigalpa en 1909, en seguida de la Conferencia de Washington, suscribió en sus deliberaciones, la convención de que la base del sistema futuro monetario en Centro America sería el peso oro y el de plata en condiciones de paridad, de la ley, peso, tolerancia de peso, tolerancia de título, diámetro y talle al de las mismas monedas de oro, plata y níquel de los Estados Unidos de America, dejando a las futuras conferencias la fijación de la fecha a partir de la cual los Gobiernos deberían proceder a la conversión del sistema monetario.

Desgraciadamente este proyecto quedó como otros tantos que se elaboraron en las sesiones sucesivas, en estado embrionario, no tanto por falta de voluntad, si no, más bien por completa ausencia de estudios detenidos que requería previamente un proyecto de tal transcendencia y pretensiones.

Honduras, mientras tanto, vino así a sufrir todos los inconvenientes que derivan de la inestabilidad del valor de la moneda, que varía con la fluctuación de la plata y la fluctuación en los cambios, siempre en contra de Honduras, por supuesto.

Es verdad que por los cuidados en proveer a una recta administración en la República, después por los del gradual desarrollo económico, con la relativa importación de capitales extranjeros en empresas ferrocarrileras de la rica zona frutera de la costa norte de la República, etc., como también la creencia que la baja de la plata fuese un mal transitorio, no se hizo sentir mayormente la necesidad de modificar el sistema monetario. Además, esto encuentra aun hoy enérgicos sostenedores y defensores en algunas clases, sobre todo entre los agricultores y los explotadores de minas de plata.

Los primeros sostienen que la baja de plata favorece la agricultura ya que ven aumentar la exportación del ganado y de productos especiales del trópico (bananos, zarzaparila, café, caoba) que por su precio en plata encuentra fácilmente adquisidores fuera del país. Los segundos temen que con la modificación del sistema monetario llegue á despreciarse aun más el metal blanco y por consecuencia que se perjudique la industria minera.

Mas en frente a todos estos argumentos no hay tampoco que perder de vista que muchas de las desventajas que resaltan del bajo precio de la plata, afectan justamente á Honduras: primera, en el encarecimiento general de todos los artículos de consumo, entre los cuales está el maíz y el frijol, principales alimentos de las clases pobres de Honduras, y que deben ser, á veces, importados de los Estados Unidos, haciendo ilusoria el alza de los sueldos. La importación

de las máquinas necesarias á la agricultura e industria, está obstaculizada por el mismo alto precio porque deben ser compradas en el extranjero. Y no hay tampoco que dejar fuera de consideración el agravio de los contribuyentes debido al aumento de las sumas necesarias para pagar las adquisiciones y servicios del Estado en el extranjero, en equivalente oro.

Nuestro principal banco emisor nacional, El Banco de Honduras no sufrió por la baja de la plata, porque está constitutido con capital nacional, (en plata). Mas su inferioridad respecto a los bancos extranjeros es manifiesta, a causa de las fluctuaciones de su capital que, por estar esencialmente constituido con moneda hondureña, sigue la suerte representada por el valor comercial del metal.

No se debe olvidar tampoco que disminuyendo notablemente los beneficios sobre los capitales invertidos en Honduras, se genera una corriente de desconfianza contra el mercado hondureño, al retirar los capitales de unas inversiones, para emplearlos en otras más provechosas.

El problema del cambio, relacionado con medidas como la que significa la preparación del patrón oro y la desmonetización de la plata que se desea, lleva en sus entrañas otros problemas que en las actuales circunstancias se presentan de solución difícil.

Para marchar al *patrón oro* necesitaríase previamente dos cosas: un empréstito grande y la desmonetización de plata, cuyo monto actual se calcula en 8 millones de pesos.

En cuestión de empréstitos, el mercado, no los proyectos, es quien da la ley y a parte de la precaria situación actual de los mercados monetarios, poco propicios para un feliz éxito, no se podría llevar a cabo ningún empréstito exterior, mientras no se hagan los arreglos necesarios para satisfacer la deuda externa del país, actualmente en suspenso.

Además, tenemos que llamar la atención sobre los peligros que encierra la desmonetización de plata en la actual época. No estarían sólo en el perjuicio o gasto de cerca de un millón, que a los precios actuales suponga gastos no despreciables, ya se vayan sacando de las rentas anuales, o se echaran por el procedimiento del empréstito sobre las generaciones venideras. Cuando el país ha visto cambios de 125–140%, sin que se haya desmonetizado ni una moneda de plata no parece momento muy apropiado para imponerle hoy este sacrificio, que la práctica y realidad han demonstrado ser innecesario.

No es ahora tampoco buen momento para ello cuando, cual sucede por motivo de la guerra, el metal blanco continua con tendencia a la baja. Debido á las dificultades que ofrecieron la venta, la plata alcanzó, con su cotización de 48 y medio c. onza casi el más bajo precio desde un decenio. Es de suponer que después de la paz europea, la plata como mercancía vaya aumentando de valor en el mundo, y, así, cuanto más se retrase la desmonetización, menos se perderá al vender esa plata, cambiándola por oro.

Pero aparte de todo esto, algo circunstancial no puede desconocerse que la plata como moneda ha prestado a Honduras un servicio no bien apreciado en los días difíciles que corren. Ella no ha servido de barrera para que el Banco no suspendiera todo pago, llegando al curso forzoso, a los "asignados," con todos sus horrores y ruinas.

Y los que piden a todo trance reformas de carácter monetario para resolver el problema del cambio, olvidan que el cambio obedece á la balanza mercantil, mejor dicho, económica no monetaria.

Honduras importa mucho más que lo que exporta y si se agrega a esto los demás pagos que ella debe hacer para cubrir en el exterior los servicios diplomáticos, las becas, etc., sin olvidar que el 46% del valor de la exportación

está constituido por la plata, es decir, por un producto comercial que sigue las fluctuaciones suyas naturales en el extranjero, y no aquello que al contrario se le quieren atribuir al país, se comprende que Honduras no está en condición de resolver con la cantidad exportada de sus productos, la propia situación monetaria. La relación entre el oro y la plata no siempre puede ser arreglada por disposiciones legislativas. Y con la constante balanza desfavorable de pagos, Honduras vería bien presto huir el oro que tanto debería intersarse en conservarlo.

No, Honduras no tiene más que un sólo medio para marchar al patrón oro y es el de desarrollar las propias industrias, sobre todo extendiendo e intensificando la producción agrícola, emancipando así su población del extranjero. Y así podrá ir al patrón oro con la lentitud que impone tan difícil empresa y constituir al mismo tiempo también una base granítica a esta reforma monetaria. Esta no puede ser obra de un día. Las naciones más ricas de Europa han tardado varios lustros en llevarla a cabo. Y en nuestro Continente, Mexico, Costa Rica, Nicaragua, etc, dan concluyente testimonio de las dificultades de la empresa; ellas se encuentran entre Scila y Caribdis: ni una, ni las otras han podido resistir a la primera prueba de fuego. Costa Rica y México decretaron ante las graves dificultades de la actual época, el curso forzoso y en Nicaragua existe el patrón de oro—que tantos onerosos sacrificios le costó—sólo artificialmente. Costa Rica y México desde el día que el patrón oro ha dejado de circular, no han podido evitar derrumbamientos y en Nicaragua falta el numerario suficiente y el comercio ante la imposibilidad de poder conseguir giros sobre el extranjero, se encuentra en situación dificilísima.

No es en los actuales momentos de crisis mundial el más oportuno para encadenarnos con compromisos por marchar al patrón oro ni podemos de la noche á la mañana cambiar nuestro actual sistema monetario.

Antes de dar el primer paso en el largo y áspero camino que tendremos que recorrer, antes de que podamos dirigirnos a la moneda sana, a la moneda cuyo valor legal coincida con su valor intrínseco, hay que mejorar previamente nuestra balanza económica.

GOVERNMENT MONOPOLIES AND INTERNAL-REVENUE SYSTEMS.

By CARL C. PLEHN,
Flood Professor of Finance, University of California.

THE LIMITS OF THE DISCUSSION.

The topic assigned to me reads "Government monopolies and internal-revenue systems." These are two very large subjects for a short paper. The existing literature upon them is enormous. I shall assume that the topic calls only for a comparison of two plans for raising revenue from sources to which each plan is equally applicable, namely, the plan of an excise tax and the plan of monopoly. Under this assumption, our subject must be limited in both its terms. The term "internal-revenue systems" is broad enough to include many taxes, like the income tax in the United States to-day, for which there can be no corresponding monopoly. The term "government monopolies" would include the post office, government railroads, government telephones and telegraph systems, and other enterprises not operated primarily for revenue purposes and not comparable with any general taxes. These enterprises may, to be sure, be used for revenue purposes. The recent proposal in England to raise the postage rates in order to get war revenue is a most striking example.

But all will agree that such a use is exceptional, and that service, not revenue, is the main consideration in establishing such enterprises. In fact, such monopolies often result in a loss in tax revenues not offset by any profits.

The discussion must be further restricted, so far as it is possible, to a consideration of the purely fiscal features of these two methods of raising revenues. In actual practice some of the most important excise taxes and their corresponding monopolies have been and are used for regulation or to carry out some theory of social reform. To discuss these theories of social reform and to review the effects of the attempted regulation in so short a paper would result in little more than a dogmatic statement of the writer's personal views. Yet regulation can not be ignored, because it is, in many of these cases, the chief political consideration involved in the choice of the forms and methods of taxation.

A typical example of the sort of comparison involved in our subject, as thus limited, would be that between the United States excise taxes on tobacco and the French tobacco monopoly. Here we have a case where the fiscal considerations are paramount and where regulative and social reform purposes are largely absent. On the other hand the taxation of liquor, whether by the excise-tax plan or by the monopoly plan, can never be discussed without some regard to the prevailing sentiment on the use or abuse of liquor.

It will have to be further assumed, in order to keep within the limits of a short paper, that the discussion is to be restricted to nation-wide taxes and monopolies. City monopolies, octrois duties, and local licenses rest on principles somewhat different from national monopolies and duties, and while their existence modifies the national revenue system they still form a topic by themselves.

THE GENERAL THEORY OF GOVERNMENT MONOPOLY.

It is inevitable that a decision in favor of one or the other of the two plans for raising revenue that we have under consideration will be colored by the theory of government, or of the extent of its functions that we may hold. A pronounced individualist would, on a priori grounds, favor the tax plan. For him the burden of proof would always rest on those who favor monopoly. One who leans with favor toward every extension of government functions would perhaps put the burden of proof on the other side. At the same time there are pronounced individualists who have been led to favor the monopoly plan in some cases, because it seemed to have certain practical advantages, and especially to better protect the public revenues.

Monopoly, besides being a very effective mode of collecting the revenues from the consumer, also appropriates to the government the profits which private producers, or sellers, as the case may be, would make. This narrowing of the field of private enterprise is to my mind the main a priori objection to monopoly, but is only a theoretical and not a final objection. Among the practical objections that have been raised are, of course, the excessive cost of government operation, and the indifference and indolence of bureaucratic employees. These may or may not be strong objections according as the government is strong and efficient or weak and corrupt.

There is one general observation to be made on the form and extent of the monopoly. The monopoly may cover—(1) the production of the raw materials, (2) the manufacture, or (3) the sale. Or it may cover all three or any two of these processes. Generally the production of the raw material does not come within the monopoly. Manufacture is almost always under the monopoly, while sale, especially retail sale, is not necessarily under the monopoly. It is

obvious that the revenues can be protected by monopoly at any one of the three points and that the choice will depend on the character of the commodity and the conditions of its production and sale.

THE REVENUE SOURCES INVOLVED.

It is commonplace to point out that consumption taxes, or monopolies in place of such taxes, must, to be productive of revenue in any considerable quantities, apply to articles of wide use. It is also commonplace to urge that articles the use of which is not essential to life and well-being are the best adapted to this purpose, although there is at least one notable exception—salt.

A discussion of excise taxes by themselves would lead us to consider the possibilities and merits of a general excise-tax system or some system of taxation like the alcabala and the bolla, as against an eclectic system of excise taxes. But a comparison of excise taxes with Government monopolies must be confined to those cases in which a monopoly can in some practical way be substituted for the tax. The substitution of Government monopoly for a general excise tax on all commodities would result in very nearly complete socialism, and as the distinction between public and private earnings would disappear the idea of a tax would also vanish.

There are many commodities on which excise taxes have at one time or another been levied which do not seem to lend themselves to Government monopoly in any such way as to accord with existing industrial conditions or the prevailing views as to the functions of Government. There have been excise taxes also on articles of such a character that the tax method is clearly the cheapest and easiest way of reaching them, and Government monopoly has not been suggested except for purposes other than fiscal. Thus there have been, or are, duties on automobiles, bottles, bricks, gasoline, glass, iron, leather, paper, patent medicines, playing cards, silks, soap, starch, tiles, toilet articles, and other things in connection with which a Government monopoly would not often occur.

There are also some articles of wide consumption which are imported, and hence can be more easily reached by customs duties. Save in the countries of origin tea and coffee are in this group.

For all practical purposes we are confined to a short list of commodities. They are salt, liquors, tobacco, sugar, matches, and explosives. What others there are, are of minor importance.

Salt.—The salt tax and the salt monopoly are both old and still used methods of raising revenues. But they are both in ill repute in many countries. This is doubtless due to historical abuses of these powerful means of raising revenue. It is perfectly feasible to collect large sums from salt without oppression. But such a tax is, like all effective consumption taxes, very unequal. It has often been said that such a tax is in effect a regressive poll tax. The inequality is, however, negligible unless the tax is very heavy.

An advantage claimed for the monopoly of salt is the possibility of adjusting the charges according to the use. Beyond this it seems a matter of indifference which way the revenue is collected. The salt tax is easy to enforce and cheap to collect. There is no very good reason to be found for taking from the producers of salt the profits which they can make from the enterprise. But Leroy-Beaulieu's statement that the salt monopoly would deprive the dwellers on the coast near the salt marshes of a living, which as they view it, heaven bestowed upon them, is not altogether pertinent. This is not a necessary consequence of monopoly. It is not only conceivable but probable that a

well-organized government monopoly would pay these people wages in excess of what their earnings would be under free competition.

Liquors.—Liquors fall into three classes which have to be considered separately. These are spirits, malt liquors, and wine. The excise taxes used to reach these are of two classes. They are license taxes on the manufacturers and on the dealers, and excise taxes in the narrower sense on the goods themselves graded according to quality and strength. In addition to any general taxes there are often local taxes, which are confined in most cases to the local dealers. There are so many forms, kinds, and combinations of these taxes in different countries that any attempt to describe them would be beyond the capacity of a short paper.

Distilled spirits.—The protection of the revenues on spirits under the tax plan involves a supervision of the manufacture and sale, which is most extensive and inquisitorial. In the United States, for example, the supervision of these taxes begins with the manufacturer of the stills. Every detail of the location and construction of the distilleries is prescribed by law. The ingredients purchased for the manufacture of spirits are checked so as to afford a check on the amount of the product. The rectifiers and bottlers are subject to similar regulations and inspection. The liquor matures in bonded warehouses under guard. The retailer likewise is under supervision, although not so rigid as in the other cases. Elaborate systems of branding barrels, of stamps, and other devices are used to distinguish the legal taxed liquor from the illicit untaxed liquor. The system is wonderfully made and wonderfully effective, but it is expensive. Any other tax system to be as effective would be as expensive. But this is not the whole expense that falls on the consumer in addition to the tax. We have to add to the expenses of government proper, for collection, gaugers, inspectors, and guards, a goodly sum for the expenses imposed on the distillers, rectifiers, warehousemen, and all dealers by the requirements of the law. How much these are it would be hard to learn. But for our present purpose it is sufficient to note that the cost is very heavy.

Malt liquors.—The administration of the excise tax on malt liquors is simplified by the fact that the commodity is one of less value in bulk than the spirits and hence less easily concealed and put illicitly on sale. But even here there are elaborate precautions against evasion of the taxes.

Wines.—In the case of wines the taxes are not generally imposed until the sale takes place, and on account of the nature of the production less supervision is necessary.

Government monopoly of spirits.—Government monopoly of the production of spirits is quite feasible. Disregarding for the moment any regulative purpose and looking at the question solely from the fiscal side, it is safe to say that a well administered government monopoly would be cheaper in cost to society as a whole than an excise tax and quite as effective in getting the revenues. As the liquor would be in the hands of the Government from the beginning there would be no necessity for the great staff of collectors, gaugers, guards, and inspectors and the duty of preventing illicit production would not add much, no more than under the tax system, to the cost of the regular force for the enforcement of all laws. Furthermore a part at least of the producers' costs for compliance with existing excise tax regulations would disappear. There would also be a considerable social saving in the elimination of the costs of competition, or, where it exists, of the monopoly profits, so far as excessive, of the private monopolists.

Interesting questions would arise as to whether the monopoly should extend from the beginning of production down to the actual sale to the consumer or

stop with the production. Probably there would be little fiscal advantage in carrying the monopoly beyond the completion of production. This would leave the regulation of selling to the localities.

Still ignoring any regulative features, the wisdom of Government monopoly would turn largely on local conditions as to the Government's ability to conduct a large manufacturing enterprise successfully. This involves general economic and political considerations too large for this paper. But it may be pointed out that for a monopoly of this sort efficiency is less important than, say, in the administration of a railway.

Regulation of the trade confuses the issue.—As already suggested, regulation will inject itself into the problem of getting the most possible revenue from the liquor traffic. Prohibition may arise and destroy the revenues. The desire to restrict the use of liquor will prevent a Government monopoly from being run on the strictly business principle of getting the highest net return. It would be considered improper to stimulate the trade. The prices or rates charged must be high enough to suppress consumption partly. That means loss of possible revenue. It is possible that the Government might be jealously concerned as to the quality of the liquor, at least to the extent of not making any adulterated compounds injurious to health.

It is an open question where it would be best to begin the regulation—in the national or in the local field. Barring some recent efforts to protect those users who have a taste for pure as against rectified spirits, the United States has done little under the excise-tax system to enter the field of regulation. That and prohibition are now matters of local concern. But it would seem highly probable that Government manufacture would at once lift the question of regulation into the Federal field. How far this would result in a clash between the central and the local governments is a matter of surmise only.

National manufacture of spirits would by some be regarded as giving to the trade a higher sanction than it now has and this would greatly complicate the political situation in all places where the prohibition sentiment is strong. This objection would come much more to the fore under Government monopoly than it does under an excise-tax system.

It might be well to admit that the question would, in the United States, at least, and possibly in many other countries, be decided primarily on grounds of regulation and not on fiscal grounds at all.

Summary of advantages and disadvantages.—Assuming, for the moment, that the Government is efficient in industrial management, we may summarize the advantages and disadvantages of monopoly as follows: Against monopoly and in favor of the excise-tax plan is the noninterference with individual enterprise and initiative. The tax plan lessens to a certain extent the pressure on the Federal Government to enter the field of regulation, and hence leaves a larger field to the local governments. The first of these reasons will not be considered pertinent by those who do not lean toward individualism. So will the second by those who are strong federalists. In favor of monopoly is the lessening of general costs as set forth above.

The fiscal advantages seem to lie with the monopoly. But so long as the question is as it is, one of politics mainly, it is probably idle to urge fiscal advantages. When Russia in a single day passes from monopoly, primarily for revenue, to prohibition, and that in the face of unprecedentedly heavy war-revenue needs, the fiscal argument seems very weak.

Government monopoly of malt liquors.—The question of a Government monopoly of malt liquors is on all fours with that of distilled spirits with one important exception. The exception is that the evils arising in connection with the

use of malt liquors are not generally considered to be so great as those from the use of spirits, and hence the case for regulation is not so strong politically.

Government monopoly of wines.—In the nature of the industry a Government monopoly of the production and sale of wine would be so difficult to maintain that we may pass this with the single suggestion that the social costs as well as the interference with individual enterprise are in this case too great to be overcome by any possible gains through monopoly.

Tobacco.—Government monopoly of tobacco is a proven possibility. It is interesting in this connection to note the changes in the views of the French economist, Leroy-Beaulieu. In one edition of his treatise on the science of finance he somewhat reluctantly admitted that the "impossibility of getting, by any other means, so great a revenue from tobacco and the impossibility of collecting such revenue in a less offensive or less vexatious manner is, for the time being at least, the justification of the monopoly." In the fifth edition he says: "The countries of the Continent of Europe which have had the courage to establish the monopoly of tobacco draw from it large revenues, and not one of them wishes to renounce the system." Again, in another place he says: "We advise all those countries which have the monopoly of tobacco to conserve it." But he is careful to say that the administration must be good.

As compared with the monopoly of liquor the administration of the tobacco monopoly is simple. Charging all and no more than the traffic will bear is a rule which has full sway. The question of regulation of use is almost entirely absent. At the only point where the question of regulation would enter at all, namely the sale of tobacco to minors, monopoly can be more effective than any other method. I still maintain this in the face of Leroy-Beaulieu's facetious reference to the encouragement given to the young recruits in the barracks to learn to use tobacco. The sale of tobacco is not, even where the excise-tax system prevails, regulated or controlled locally. An exception to this is afforded by the local regulations in the United States as to the sale of cigarettes. But at all events there is no exciting political question involved.

The completeness of the monopoly is the main question. It is safe to assume that the growing of the plant will be left to private enterprise. No government would feel justified in acquiring land for this purpose. This is the more true where grades of tobacco are grown which rapidly exhaust the qualities of the soil that are requisite and hence require frequent changes in the terrain under cultivation. But the grower can be allowed to sell only to the Government. It is important to note that tobacco has but one use, and so this restriction on the grower is no great hardship. The ingredients of whisky have so many other uses that this possibility is barred. Monopoly could stop at the close of manufacture. There is no necessity for control of retail selling. At that point questions of expediency enter in. It is hard to decide whether the French sales booths are used as substitutes for a pension system or as rewards for political services. That the quality of the tobacco manufactured by governments is universally bad is not a necessary consequence of monopoly. The smoker is himself to blame.

Yet in spite of the encomiums of the eminent French economist there are not quite so marked fiscal gains to be had from the monopoly of tobacco as from the monopoly of liquor—that is, as compared with excise taxes. The cost of collection and the prevention of illicit sales under the United States system of taxes on tobacco are not large. The regulations for the enforcement of the collection of the tax which are imposed on the manufacturer are not onerous. The greatest saving to the community at large would be in the elimination of the competitive costs or, where private monopoly exists, of the excessive profits of the monopolist.

With the fiscal advantages in favor of the Government monopoly of tobacco and the favorable results obtained in Europe, why is it that there is no trace of a movement in the United States in that direction? I think the answer is to be found in the following reasons. The first reason is that with us Government activities have expanded along the lines of control and regulation only. We are still an individualistic country in sentiment. The second reason is that the Federal Government has seldom been sorely pressed for revenues. Should the Federal Government adopt a free-trade policy, or should its expenses increase materially, or if the profits of the tobacco manufacturers should excite popular discontent, the suggestion of a tobacco monopoly may possibly be heard in the land.

Sugar.—Next to liquor and tobacco, sugar is the commodity that can best bear heavy taxation and yield large revenues. Like these and unlike salt, it is in no sense a necessity. The problem involved in the taxation of sugar by the excise plan or by a monopoly is so much like that of tobacco that we need note only the main difference. This difference lies in the complicated policies of the great nations in regard to the foreign trade in sugar and the encouragement of the production of beet sugar. There is such a snarl of bounties, retaliatory and reciprocal customs, and other regulations of hostility between the home growers of beet sugar and the importers of cane sugar, of popular dissatisfaction with the trusts in control of refining, that the political outcome of a movement for a sugar monopoly would be very dubious.

On the other hand the administration of an excise tax on sugar is simple and inexpensive, and would in most instances outweigh the advantages of monopoly.

Matches.—Matches are an admirable source of revenue, although the amount obtainable is not very large. Here, again, we need note only the differences involved between this and those articles already discussed. The main difference lies in the vocational diseases connected with the manufacture of matches. Under governmental monopoly these diseases could be effectually stamped out. It is going to be a long, hard process to eliminate them by any other method. No excise tax lends itself readily to the control of the quality of a commodity and still less to the control of the process of manufacture.

Explosives.—Explosives have three legitimate uses—(1) in the industries, (2) for sport, and (3) for war. The first two can stand very heavy taxation, the last is solely an affair of government. Explosives also have their illegal uses for murder, arson, and destruction. We have in the war use and, in the necessity for the prevention of the illegal uses, arguments that are well-nigh incontrovertible in favor of Government monopoly. No form of excise taxes can so effectually reach the first two uses of explosives as can a monopoly, and they hardly touch the other uses.

When we contemplate the enormous "war profits" of private enterprise in this field—profits which are admittedly the proper subjects for extraordinary taxation—we can but wonder why the Government should not take it all. When we contemplate the impropriety of swelling the costs of war for no other purpose than for private profit, we wonder that any Government should permit private industry in this field. When we consider how dangerous to peace is the trade in these commodities between neutrals and belligerents, we wonder why it has escaped the agreements that form part of the substance of international law. It seems clear that in this instance Government monopoly would rest on higher grounds than any fiscal considerations, although the latter are not inconsiderable. With Government monopoly of the manufacture and sale of explosives the sale to a belligerent would be a cause of war with

the other belligerent, as it should be. Pity it is that the same methods could not be as easily extended to the manufacture of all firearms and all munitions of war.

PROTECTION AND NATIONALISM.

By ALVIN S. JOHNSON.

In the work of nation building there is probably no other force at the command of the statesman equal in potency to the power to regulate foreign trade. It is a force that can work evil as well as good. History affords abundant instances of the good results of a wise application of protective principles and, perhaps, even more abundant instances of the abuse of these principles. A judiciously devised protective system will in the end make for national self-sufficiency and international harmony for the building up of national capital and the opening of opportunity to all the talents of a people. An ill-conceived protective system will impair the independence of a State and foment international antagonism, it will retard the accumulation of capital, and concentrate opportunity and power in the hands of special classes to the prejudice of the general welfare. To distinguish between the proper use of protection and its possible abuses is a primary requirement of modern statecraft.

The concrete problems of protection differ widely in detail, according to geographical circumstances, natural endowment, the genius of the people, and the stage of industrial development. Economic science offers, however, one principle of general validity, that offers at least a clue to sane tariff construction. In practically all circumstances a protective duty represents an immediate cost to the nation. The loss to the consumer from the higher prices resulting from the duty exceeds the aggregate fiscal receipts and the profits of the protected producers. Protection, like armament, is a net social burden; but, again, like armament, it may be nevertheless to the advantage of the State. Recognition of its character as a social burden will serve to place emphasis upon two practical principles: (1) A sane protective policy will hold clearly before it the ultimate objects it is sought to attain, and will seek to ascertain whether these objects can be attained economically by protection alone, or whether protection requires supplementation by other national policies, such as scientific and industrial education and development of natural resources; (2) wise protectionism will not seek to establish at once all the conditions of industrial independence but it will evolve gradually along the line of least resistance, never placing upon the people a heavier burden of protection than they can easily bear.

Recent history has emphasized the vital importance to every independent nation of those industries that serve as a foundation for the supply of prime military necessities. In the event of war nothing can make up for the handicap under which a nation labors through lack of well-developed metallurgical, engineering, and chemical industries. If a nation does not possess natural sources from which to draw the crude materials of such industries it would still gain immeasurably in independence if it developed the intermediate and finishing industries, based on imported supplies. It would be no serious undertaking for a State to keep on hand one or two years' supplies of pig iron and steel billets, crude copper, lead, zinc, etc.

Such industries, however, furnish equipment for practically all other industries, and any attempt to build them up through high duties alone would mean handicapping the rest of the national industry. Metal working, engineering,

the production of chemicals, require a high development of technical and scientific training, and such training is a matter requiring decades or even generations if no other impulse is given to it except high duties on the product it helps to create. The case is different if the protective policy is supplemented by a vigorous national policy of industrial and scientific education. There is no contrast more striking than that between the rate of industrial progress in Germany, where a protective policy was supported by an educational policy, and the rate of progress in the United States, where protection alone was relied upon. Allowance made for her great inferiority in natural resources, Germany since 1870 has achieved a progress incomparably greater than that of the United States.

The industrial requirements of a truly national State are not adequately met even when provision is made for the supplying of prime necessities in time of war. Variety of employments is necessary if all the talents in a society are to be given a chance for expression. In a State where agriculture and trade afford practically the only means of employment numerous individuals find themselves thwarted in their just aspirations for advancing themselves. Practically every such State encounters from time to time agrarian discontent and disorder. A State with a healthy diversity of agriculture and industry offers to persons discontented in one branch an escape to the other. A well-rounded economic system makes for political stability and progress. Indeed, economic diversity is practically the essential condition of a well-balanced political system, given modern conditions of freedom and general education. To create such diversity is well worth the social cost inherent in a protective system. It is, however, of prime importance to keep the social cost as low as possible by confining protection at first to the industries in which the national producer is at the least disadvantage as compared with his foreign competitor, and by supplementing the protective policy with auxiliary policies, educational and developmental. It is worth while to fix our attention upon the sagacious policy of the Spanish Government in its attempt to build up the industries of Catalonia. Here is a large population, of excellent industrial quality and wide diversity of talents, enjoying a geographical situation most favorable for the importation of materials and the exportation of products. There is lack of industrial training and business experience, and a permanent system of protection will be required to develop these. But an apparently more serious handicap was the high cost of fuel for power. The Government of Spain is meeting this difficulty through the systematic development of hydroelectric power from the River Ebro. Catalonian industry will be placed on a sound footing many years earlier than would be possible if reliance were placed entirely upon private enterprise, sheltered by protective duties.

It is of the greatest importance for a national State to foster the accumulation of capital among its citizens. To this end nothing is more conducive than a steadily expanding industrial system. Every business man engaged in building up a new industry strives to accumulate capital of his own, reducing his living expenditures wherever possible. On the contrary, a State based chiefly on agriculture and the auxiliary commerce accumulates little. A standard of living gains vogue which consumes most of the current income, leaving nothing for capital formation. Though such a State may be very rich by nature, it is almost invariably poor in capital, and is forced to draw upon foreign financial markets for capital to develop any major enterprises that it may undertake, such as railway construction or the opening of mines. At the present day the sources of capital exportation are the States with fully developed industries, largely created by protection, while the States importing capital are those that have neglected to build up their industries. This rule

holds good without regard to race or geographical location. Industrial Japan is building up her own capital and exporting capital to agrarian Manchuria, just as the industrial States—England, Germany, France, the United States—export capital to the agrarian States of Europe, Asia, Africa, and America. There are advantages to be gained through import of foreign capital. But a nation prospers best if it generates an abundant capital of its own as well.

To the end of developing the national capital it is desirable that such industries be selected for encouragement as suffer under relatively slight handicaps as compared with competing foreign industries, and that they be given adequate but not excessive protection. Excessive protection, instead of developing national enterprise and capital, is likely to draw in foreign enterprise and capital. Thus, Russian protection established on Russian soil industries that were in fact German, French, and British. Most of the advantages flowing from the establishment of foreign enterprise on the national soil are merely specious.

A national economic system built up through a judicious employment of protective duties and auxiliary policies of education and development of natural resources is conducive to national independence, wealth, and political stability. In the long run it is conducive to international good will and advantage as well. The mutual interdependence of industrial and agrarian States is not a healthy political phenomenon. It leads to a rivalry between industrial States for the nonindustrial markets and to attempts on the part of each party to the dependent relation to exploit the other. Moreover, a nonindustrial State remains poor, relatively to its potentialities, and therefore offers a restricted market to the foreign States with which it has dealings. The relations between the United States and European countries are not only on a sounder basis but are of greater mutual advantage than they would have been if the United States had failed to develop its industries and had remained an economic dependency of Europe.

The Latin American States, with their unexampled natural resources and their great and growing population, are destined to enjoy a foremost rank among the industrial States of the world. They can hasten the day of economic independence and international power through the adoption of national policies of development. An essential part of such policies will be the laying of burdens upon foreign trade, to the immediate disadvantage of foreign nations supplying their markets. But provided that such burdens are levied, not in a spirit of international hostility and not with any ruthless disregard of foreign interests, but with a judicious view to the needs and possibilities of nationalistic development, the immediate disadvantage to foregn trade will be greatly overbalanced in the end through the gain to the world arising from the prosperity of the Latin States.

THE PRINCIPLE OF EQUITY IN THE TAXATION OF FOREIGN CORPORATIONS.

By FRED ROGERS FAIRCHILD,

Professor of Political Economy, Yale University.

It will be accepted without argument that one of the requirements of a sound tax system is justice to the subjects who bear the tax burden. And in these modern days, when we have ceased to regard the foreigner as an enemy to be mulcted without further consideration, it is hardly necessary to argue that the principle of justice is to be applied to foreigners as well as to our own citizens.

It is largely the principle of justice which makes the taxation of foreign corporations a special problem apart from that of the taxation of corporations in general, and it is the problem of justice in the taxation of corporations by different competing jurisdictions which is the subject of this essay. The principles involved are the same, with very few exceptions, whether the two jurisdictions concerned are separate nations or merely states of a federated union like the United States of America.

An adequate discussion of the subject must cover not merely the taxation of foreign corporations (in the narrowest sense—i. e., corporations chartered by another State), but also the taxation of domestic corporations in all cases where foreign States have any jurisdiction and power of taxation over them. In short, we have really the problem of the taxation of all corporations subject to taxation by two or more competing jurisdictions. And this includes not merely the direct taxation of the corporation itself but also the taxation of the owners, whether stockholders or bondholders.[1]

At the outset it is necessary to remind ourselves that justice has to do with persons only. The burden of taxation is all borne by persons. Those who speak of taxation as imposed upon persons and property are usually guilty of confusing the object and the subject. There is no such thing as justice to property as distinct from the owner of the property. Likewise there is no such thing as justice to corporations. The burdens of taxation are not borne partly by persons and in addition by certain corporations. Corporations as such bear no tax burdens. Corporations are taxed as a means of reaching certain natural persons, who alone bear the burden of taxation. If justice is secured to all natural persons we do not have to inquire further whether certain corporations have been justly treated. The requirements of justice have been fully met. This does not mean we can tax corporations without regard to the question of justice. Quite the contrary. It simply means that we must always look beyond the corporation to the persons affected.

A State comes into contact with a corporation in one or more of the following ways:

1. Through being the authority that has created (chartered) the corporation.
2. Through being the place of location of the corporation's property.
3. Through being the place where the corporation does business.
4. Through being the residence or domicile of the owners of the corporation (stockholders and bondholders).

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[1] The taxation of foreign corporations has usually been treated as a phase of the broader topic of double taxation. References to double taxation will be found in most of the general works on public finance, though the foreign writers generally pay little attention to the taxation of corporations. Cf. the article on Doppelbesteuerung by Eheberg in Handwörterbuch der Staatswissenschaften (Third Ed.), III, 553–7, and VIII, 1207; Bastable, Public Finance (Third Ed.), 332–334, which contains a brief bibliography of double taxation; Seligman, Essays in Taxation (Eighth Ed.), Ch. IV, on double taxation, with bibliographical notes on pp. 98 and 111; also Ch. VIII, especially pp. 280–297. Of special importance is the monograph by Francis Walker, Double Taxation in the United States, Columbia Univ. Studies in History, Economics, and Public Law, Vol. V, No. 1, 1895. Several recent essays on practical phases of the problem of double taxation will be found in the Proceedings of the National Tax Association; in particular F. N. Judson, Interstate Comity in Taxation, Vol. I, pp. 39–46; W. H. Corbin, Inheritance Tax Laws, Vol. II, pp. 171–194; Th. Sutro, Double and Multiple Taxation, Vol. II, pp. 547–557; C. Crocker, Judicial Opinions against Double Taxation, Vol. IV, pp. 261–266; J. F. Zoller, Taxation of Foreign Corporations with Special Reference to License Fees, Vol. VIII, pp. 151–183; Report of the Committee on Double Taxation and Situs for Purposes of Taxation, Vol. VIII, pp. 233–241, and Vol. IX, pp. 358–390.

5. Through its (nonresident) citizens being owners of the corporation.

Any one of these relations may give the State a claim upon the corporation or its owners for some contribution. Any one except the last gives the State the power to exact such contribution. It frequently happens, however, that a corporation which is related in one or more of these respects to one State is at the same time related in some other respect to another State. Both States may then claim the right to levy taxes upon the corporation or its owners, and the result may easily be unjust double taxation. The problem of the correct taxation of a corporation thus subject to two competing tax jurisdictions is the problem before us.

It will appear at once that some of these relations are of more importance than others. For example, the fact that a corporation receives its charter from a certain State gives that State a right to claim some contribution, but if the claim rests on this ground alone certainly no very heavy exaction is justified. If the corporation's property is located elsewhere, its business is elsewhere transacted, and its owners are residents and citizens of other States, it is clear that the main obligation is to the other States. A heavy exaction by the State granting the charter would either deprive other States of their just revenue or place an unjust burden upon the owners of the corporation. Moreover, the mere fact of having granted a charter gives little power to tax. The only way in which the corporation can be coerced is by the threat of forfeiture of its charter. And since it is generally possible to obtain a satisfactory charter from some other State no corporation is likely to submit to a heavy exaction.

The State of New Jersey has obtained a large revenue in taxes or fees from corporations to whom it has granted charters and whose property, business, and ownership are often largely outside the State. But this has been possible only because the demands have been modest enough not to counteract the advantages derived from incorporating under the rather liberal laws of New Jersey. In general it appears that the mere fact of incorporation gives a State the right and the power to exact nothing more than a moderate fee or tax based upon the privilege of incorporation.

Again, the fact that the owners of a corporation are citizens of a certain State gives that State only the most shadowy claim upon them for taxation on account of their income from the corporation. That is, suppose a citizen of State A resides abroad and derives his income from investment in a foreign corporation, all of whose property and business are without the jurisdiction of the State A. The mere fact of citizenship gives the State A no real claim upon this citizen so long as he continues to reside outside its jurisdiction. Political allegiance, which formerly was a controlling reason for tax obligation, is no longer of great significance.[1] To-day it is residence or domicile rather than citizenship that controls tax obligation. The obligation of the stockholder in this case is wholly to other States than that in which he holds his citizenship. Also the State in question has no apparent means of enforcing payment from such nonresident citizen on account of his ownership in such a corporation, unless it may possibly attach some other property of the citizen which is located within its jurisdiction.

We have left the three really important relations between the corporation and the State: (1) The location of its property, (2) the place where its business is conducted, and (3) the place of residence or domicile of its owners. It is when a corporation is related to one State in one of these ways and to another State in another way, or where in any one of these respects a cor-

[1] Seligman, Essays in Taxation, 111–112.

poration owes a divided allegiance to two or more States, that we have the real problem of taxation of foreign corporations.

Corporations may be subjected to various forms of taxation. They may be taxed upon their property; they may be taxed upon their capital investment (either the total investment as represented by stock and bonds or on the stock alone); they may be taxed upon their earnings (either gross or net) or upon the volume of business transacted. The owners of a corporation, on the other hand, may be taxed by an income tax upon their incomes derived from the corporation in the form of dividends and interest or by a property tax upon their shares of stock and their bonds. For the purposes of this essay it is assumed that the bondholders and the stockholders are joint owners of the corporation. While the law frequently makes a distinction and denies that the bondholders are in any sense owners, economically no such distinction is justified.

It is evident that with all these possible taxes upon corporations and their owners the door is open for various forms of unjust double taxation, even when only one taxing jurisdiction is involved. Still more serious does the situation become when the corporation and its owners are subject to simultaneous taxation by two or more competing jurisdictions.

Without attempting an examination of all the possible combinations, let us analyze the most important cases that arise in actual practice.

1. We take, first, the case of a corporation whose property and business are entirely within a given State, whereas its owners, both stockholders and bondholders, are all residents of other States. The first State has clearly the right and the power to tax the corporation by any legal method which may be effective. It may tax all of its property; it may tax it upon its entire capital (whether in the form of stock or bonds); it may tax it upon its earnings (gross or net), or upon the amount of its business. No other State has the right to impose any of these taxes upon this corporation.

At the same time the first State can not in justice ignore the fact that its taxation of this corporation will burden the residents of other States. These other States have some claims upon the taxes which may be raised on account of this corporation. If the owners had been residents of the State in which the corporation has its property and business, then the amount of a just tax upon the corporation would be limited to the burden which might justly be placed upon its owners as a part of the whole tax system of the State. In such case it would obviously be unjust to impose any additional tax upon the owners on account of their income from the corporation or their ownership of its stock or bonds.

This principle is coming to be generally recognized in State taxation of corporations. Where any kind of tax is imposed upon the corporation whose amount represents the total tax-paying ability due to ownership in the corporation it is customary to exempt the shareholders from taxation upon their shares and dividends, and frequently also the bondholders upon their bonds and their interest, although legal complications in the United States have prevented the full accomplishment of the logical result in the case of bonds.

But when the owners are nonresidents it can not be assumed that they will be thus exempted. The State of their residence is entitled to some contribution from the owners of the corporation, and justice requires that the first State reduce its demands upon the corporation accordingly. The question, then, arises, What share of the total tax should fairly be assigned to each State? There is apparently no clear principle capable of furnishing an exact answer. It is, however, generally assumed that the State in which the property and business are located has the stronger claim. This assumption is

based on what has been called the principle of economic interest or economic allegiance.[1] This seems reasonable. Without denying the obligation of the owners to the State of their residence, their principal economic allegiance on account of the corporation in question is to the State where its property is located and from which their dividends and interest are derived.

This is probably as far as we can go as a matter of principle. Prof. Schanz has suggested that the amount of tax that may fairly be imposed should be apportioned three-fourths to the State where the property is located and one-fourth to the State of residence of the owners.[2] Such an exact division is, of course, quite arbitrary. The most satisfactory arrangement would be a treaty agreement between the States involved in which the division could be made by some such arbitrary ratio. It will probably be a long time before these matters will thus be settled by treaty. In the meantime our conclusion is that the State where the property and business are located may fairly tax the corporation upon the major part of the tax-paying ability which it confers upon its owners, but that a part of this ability should be left untouched out of deference to the claims of other States in which the owners reside.

It might happen, of course, that the State in which the owners reside does not as a matter of fact impose either an income fax or a property tax, and so places no burden upon the stockholders or bondholders on account of their ownership in the corporation. In such case the State where the corporation has its property and business would be under no obligation to make allowance for the foreign residence of its owners. It is not likely, however, that all foreign States would thus neglect so obvious a source of revenue, and the task of making proper distinction between the parts of the capital owned in different countries would be complicated and impracticable. Furthermore, we are seeking the general principles which may serve as a guide to all States in their taxation of foreign corporations, and since we grant to each State the right to tax its citizens as owners of a foreign corporation we must, as a matter of principle, restrict the right of the State in which the property and business are located. It is not intended to deny that failure to exercise its claims by one State might occasionally make it possible for another State to exact more than its own normal share without injustice.

It has been assumed thus far that the State in which a corporation's property is located is also the place where its business is transacted. This assumption will ordinarily agree with the facts, although in a country like the United States, where business pays little regard to State lines, the cases where property and business are in different States become numerous and important. In international relations, however, the exceptions are rare and less important. In the case of railroads, mines, banks, telephone, telegraph, express, and car companies, etc., the business must in general be transacted in the nation where the property is located. In the case of such corporations as power companies and lighting companies there is more room for exception. The only really important exception is in the case of insurance and investment companies. Here the business transacted may be quite largely independent of the location of the corporation's property.

We will examine later the extent to which the transaction of business within its borders gives a State the right to tax a foreign corporation. For the present we may conclude that, since some such right is admitted and is actually claimed and exercised, the claim of the State in which the property is located must be somewhat reduced if a corporation conducts its business or a part of

[1] Seligman, Essays in Taxation, 118.
[2] Schanz, Finanz-Archiv, IX (1892), II, 11.

it elsewhere. Only a moderate reduction, however, need be granted, and we are still justified in allotting to the State where the property is located the major part of the tax claim upon the corporation.

2. The case of resident owners (stockholders and bondholders) of a corporation whose property and business are located outside the State is the opposite of the case which has just been discussed. As has been shown, all the residents of a State may be called upon to contribute to the State of their residence on account of income derived from investment in foreign corporations, or they may be subject to property taxes upon their stocks and bonds in foreign corporations.

The claims of the State of residence are, however, sharply restricted on account of the superior claim of the State in which the corporation has its property and its business. If we assume for the moment that the State derives all its revenue from a single general income tax whose burden would thus represent the total tax-paying ability of its citizens or residents, it is clear that a very considerable reduction would be necessary in the rate applied to incomes derived from investment in foreign corporations. If our preceding conclusions are correct, the rate on such incomes would certainly have to be something less than half of the rate imposed upon incomes derived from investment at home.

As a matter of fact no State derives its whole revenue from a single income tax. Where the income tax is moderate and a considerable part of the tax-paying ability is reached by other forms of taxation, it is quite possible that essential justice may be done without any special reduction in the rate of the tax imposed upon incomes derived from foreign investment.

In actual practice residents are generally subject to the income tax upon all income from foreign as well as domestic corporations. This is the rule in the income taxes of England, of most of the German States, and of the United States. No allowance is made on account of the taxation of the corporation in the State where its property is located. The obligation applies generally to all residents, both citizen and alien, with the exception of the purely transient alien. In the absence of any definite rule fixed by international agreement, this practice probably comes as near to a just solution of the problem as is possible under the circumstances.

It should be obvious, however, that those nations which have adopted this rule should waive all claim to taxation of their citizens living in foreign States upon incomes drawn from foreign corporations. Otherwise the person who lives in a State other than that of which he is a citizen is taxed upon the same income both by the State of his residence and the State of his citizenship. England takes the correct position and makes no attempt to tax the income of a nonresident citizen derived from foreign investment. In the Prussian income tax the matter is compromised by exempting the nonresident citizen after he has lived abroad two years. The United States, on the other hand, imposes the income tax upon every citizen, whether residing at home or abroad, while at the same time taxing every resident, whether citizen or alien. This is a violation of the principle of international justice.

Our general conclusion is that a State has an undoubted right to impose taxes upon its citizens or residents on account of income derived from investment in corporations whose property and business are located outside the jurisdiction of the State. International comity demands, however, that the amount of this tax be so determined, in relation with all of the other circumstances of the State's tax system, as to leave it possible for the State in which the corporation's property is located to reach the major part of the tax-paying ability represented by the corporation without causing unjust double taxation. It is also required that nonresident citizens be exempt from taxation

upon income derived from corporations whose property and business are outside the State.

3. We have now to consider the case of the taxation of a corporation transacting business in the State, but having no other connection with the State in question; that is, its property is located elsewhere and its owners are nonresidents. The most important example is the foreign insurance company, which maintains agents and writes insurance in the State in question. Such a corporation, it will generally be admitted, owes some economic allegiance to the State in which it is doing business, and this State has some right to impose taxes upon it.

We have already concluded, however, that the location of the property and the residence of the owners are the main considerations controlling economic allegiance. The State, whose sole claim rests upon the transaction of business within its borders, can therefore justly impose only a moderate burden upon such a corporation. Any attempt to tax a large part of the property or earnings of such a corporation would be an unjust invasion of the tax field of another State and, in case the other State exercised its rights, would result in unjust double taxation. Moderate taxes on earnings or license taxes or fees are justified.

It it not intended here to go into the legal or administrative difficulties which may arise on account of restrictions upon the taxation of interstate commerce in the United States. Our purpose is to find some principle to guide the State in determining how great a burden of taxation it may justly impose upon a foreign corporation doing business within its borders. Whether legal technicalities may prevent its exercising its right is another question, the adequate treatment of which would take us too far afield for the limits of this essay. It should always be remembered, moreover, that the factor which justifies a tax need not be the one on which the tax is actually based. The conduct of business within the State justifies a tax by the State and may indicate its proper amount. It does not follow that this contribution must necessarily be collected by means of a tax on business.

Most of the States of the United States attempt to tax foreign corporations on business done within the State when there is no property or capital that can be reached. Foreign insurance companies, for example, are usually taxed upon the premiums collected within the State. Indeed, it has been a rather common practice to tax foreign corporations at higher rates than domestic corporations, or to tax the foreign corporation when domestic corporations are exempt. This is obviously unjust to other States and their citizens.

Reciprocal and retaliatory tax laws are a common result. A given State may waive its right to tax foreign companies on business done in the State, provided the other State in which the company is located or chartered makes the same concession in favor of the companies of the first State. Or a State may impose taxes upon each foreign corporation by the same method or at the same rate as is imposed by its home State upon the corporations of the first State. By such crude means, accompanied by a growing spirit of comity, a certain approach to fairness is being reached among the States of the United States.[1]

Of course such a matter as this ought to be settled fairly to all by means of treaties or interstate agreements. In the absence of such arrangement each State should seek only the moderate contribution which it can justly claim from foreign corporations on account of business done within its borders, while

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[1] This topic is best illustrated by the taxation of insurance companies in the United States. Cf. the standard works on taxation and numerous articles in Proceedings of the National Tax Association.

at the same time seeking by the judicious use or threat of retaliation to secure the same fair treatment of its own corporations by neighboring States.

4. When a domestic corporation whose property is located and whose owners reside within the home State is doing business outside the State we have the converse of the case just studied, and the same principles apply. The home State must concede the right of the foreign State to impose some moderate taxation on account of the business transacted, and in fairness to the owners should make a corresponding concession in its own taxation upon the corporation or its owners.

For the sake of simplicity in studying the ways in which a corporation may be related to the State for taxation purposes it has been assumed that in each of these relations the entire obligation is to a single State. When discussing the claim arising from the location of property, for instance, we have assumed that the property is all located in the State in question. We have now to consider the further problems arising when one of these relations is itself divided between two jurisdictions. For example, the corporation's property may be partly located in the home State, partly in other States; likewise, the ownership or the business transacted may be divided between different jurisdictions.

In view of the principles established in the foregoing discussion this is a comparatively simple matter theoretically, although in practice it presents a great variety of interesting and often difficult problems. Having once determined what rights are given to a State as a result of each of the relations which we have examined, if the relationship is divided between two or more States it simply means that the consequent right of taxation is likewise divided, and divided in the same proportion. For example, we have seen that the location of property within a State gives that State a claim upon the corporation for a considerable contribution. If, now, only half of the corporation's property is thus located, obviously the claim based on this ground is reduced by half. The other half must fairly be left to other States. The same simple rule holds in the case of divided ownership and in the case where business is transacted in two or more States. The theoretical conclusion is perfectly clear.

The practical problems arise through the attempt to find workable and just rules for apportioning property, capital, ownership, business, or earnings between the home State and other States for purposes of taxation. Here we are frequently met with serious obstacles, which make an exact apportionment difficult and often impossible. The aim should be to seek a just apportionment and at the same time simplicity and certainty of administration. Between these two criteria there is often conflict. A rule designed to secure perfect justice may prove to be unworkable in practice. In order to secure administrative certainty we may have to be content with only a rough approximation to perfect justice. In such cases it is a safe rule to give the preference to certainty. The rule should be to secure the nearest approach to justice compatible with certainty in administration. Administrative certainty secured in this way is apt to give at least a fair approximation to justice in the long run. On the other hand, a rule which sacrifices certainty in the attempt to secure ideal justice is almost certain to defeat its own end and result in the most flagrant injustice. No better example could be cited than that of the general property tax as employed in the American States and local governments. No possible scheme could appear more just on paper, yet the impossibility of effective administration has made the American general property tax perhaps the most flagrant example in the modern world of an unjust tax. Simplicity, administrative efficiency, avoidance of doubtful points to cause controversy between tax officials and taxpayers, clear understanding of the tax

on the part of the public; these are the qualities which should be sought. If now the apportionment is made to conform with the rules of justice so far as possible without conflicting with the demands of certainty, we may generally rest assured that approximate justice will be done.[1]

Let us consider now in turn each of the important bases of corporate taxation and the problem of their apportionment between two or more tax jurisdictions.

1. Where the claim upon the corporation is based upon location of *property* each State's claim is obviously measured by the property located within its borders. Any given State must first consider the fair measure of taxation which may be based upon property as a whole according to the principles which we have already examined. Next, it must determine what part of the whole property of the corporation is located within its borders. This indicates clearly the share of the total tax obligation arising from location of property which this particular State may claim.

In the case of real estate the correct apportionment is a simple matter. The same is true of property permanently attached to the land and in general of most forms of tangible property. Difficulties arise, it is true, in such cases as the rolling stock of a railroad or car company. Such instances are, however, not of the greatest importance, and satisfactory though necessarily arbitrary rules may be constructed to meet these cases.

Where the attempt is made to take account of intangible property serious difficulties arise. The limits of the present discussion do not permit a thorough examination of this topic. As a matter of fact, the taxation of intangible property of corporations has always proved illusive, and where the attempt is made it is generally assumed that the intangible property of the corporation is represented by the excess of the value of its capital over the value of tangible property previously discovered. When thus interpreted we are led to the next important basis of corporate taxation, namely, capital.

2. The practical difficulties in the way of a separate valuation of the elements of property of a corporation have very commonly led to the taxation of *capital* as a convenient means of getting at the total value of the property, tangible and intangible. Sometimes this means taxation of the capital stock only, sometimes both stocks and bonds. The latter more truly represents the total investment in the corporation. The problem is to determine what part of the corporation's capital is located in the particular State, or, as is generally said, "employed in the State." This is apt to be a difficult matter. Here, again, space will not permit us to go into a detailed discussion. If an exact apportionment of all the forms in which the corporation's capital has been put is attempted we are right back at the problem of apportioning property. To avoid this, various more or less arbitrary rules are generally used to secure a rough apportionment of capital. For example, the State of Connecticut formerly taxed railroad companies upon their capital stock and bonds. The part employed in the State was determined according to the ratio of the mileage of line in the State to the total mileage. A better guide would have been the mileage of all tracks, and when the State adopted the present tax on gross earnings the apportionment according to all track mileage was chosen.[2]

3. *Ownership*.—Here the matter is very simple. When the tax is imposed upon the owners in the form of an income tax upon dividends and interest, or a property tax upon stocks and bonds, the proper amount of the tax which may justly be claimed on account of ownership having been determined accord-

[1] For an argument in support of administrative certainty, cf. Seligman, The Importance of Precision in Assessments, Proceedings National Tax Assn., 211–219.

[2] Rep. Conn. Commission on Taxation of Certain Corporations, 1913, pp. 40–42, 52–55.

ing to the principles already discussed, each State should simply tax the owners residing within its territory. There is no serious theoretical difficulty here. The practical difficulties in the way of taxing the owners directly on their stocks and bonds by means of a property tax are very great and are responsible for the tendency to abandon this method in favor of taxes collected from the corporation rather than from the owners.

4. *Business transacted, earnings, etc.*—Where this is the basis of the tax the problem of apportionment is simple in theory. The total contribution which may be claimed on account of business done should obviously be divided between the States concerned according to the ratio of business done within each. To accomplish this apportionment a great variety of rules has been devised according to the different kinds of corporations and the policies of different States. An exact apportionment is often difficult or impossible and in many cases not worth seeking. Simple workable rules may generally be devised which at the same time give a reasonable approximation to justice.

For example, where insurance companies are taxed upon business transacted, if each State imposes the tax upon the premiums collected within its borders the result is simple and exact and fairly just. When railroads are taxed upon their earnings, whether gross or net, apportionment may be made in various ways. An exact apportionment which takes account of every ticket and every piece of freight is possible, but involves considerable labor and expense and is lacking in simplicity. The simple method of apportioning earnings according to mileage answers much better the requirements of certainty and has generally been found to produce a sufficient degree of justice. Mileage may mean the mileage of line, but better all track mileage, in which account is taken of double-track lines, etc., sidings, congested tracks at terminals, etc., thus giving a fair measure of the relative amount of business done. The business of telephone companies may fairly be apportioned according to the number of stations located within different States. Telegraph companies may have their business apportioned according to mileage, which should preferably be total wire mileage. The business or earnings of car companies and express companies may be apportioned satisfactorily according to mileage of routes or car mileage. Where it is otherwise practicable to tax corporations upon business or earnings it is safe to say that it will always be possible to find some satisfactory workable rule for apportioning the tax between different jurisdictions.[1]

In what has gone before, we have discussed the various grounds on which a State may justly base its claims for contribution from the corporation; in particular, the location of property, the residence of owners, and the transaction of business. We have also discussed the problem of apportionment where two or more States have claims upon a corporation resting upon the same basis, as, for example, where the property is located in two or more States. It should, of course, be clearly understood that the basis which gives a State the right to tax a corporation and which measures the amount of the contribution which it may fairly exact, does not necessarily govern the kind of tax to be imposed. For instance, the location of a corporation's property within a certain State gives that State, as we have seen, a claim upon the corporation for a certain contribution. It does not follow that the State is required to collect this contribution in the form of a property tax. Having fairly determined according to the principle of economic interest the amount which may

[1] Cf. B. H. Meyer, Methods for the Distribution of Railway Values among States, U. S. Census, Bulletin No. 21, 1905, pp. 17–21. Rep. Conn. Commission on Taxation of Certain Corporations, 1913, pp. 40–42, 52–55 (railroads); p. 66 (car companies); pp. 80–81 (express companies); pp. 102–104 (telephone companies); p. 121 (telegraph companies), etc.

be raised, the State is obviously free to secure this contribution by means of any tax which is suitable for the purpose.

The foregoing principles should be sufficient to enable a State to judge what contribution it is fairly entitled to exact from foreign corporations and how it may secure it with proper regard to the rights of other taxing jurisdictions.

Unfortunately, there is at present no way in which a State may be assured that other nations will show equal consideration of its rights. Even among the Commonwealths of the United States, the matter is left entirely within the discretion of each State. No Federal law regulates interstate double taxation, and there are peculiar difficulties in the way of State agreements. Some considerable progress toward mutual fair treatment has been made, partly through the means of retaliatory and reciprocal tax laws, and still more as a result of increased knowledge of tax technique and a growing spirit of interstate comity. In the European federations of Germany and Switzerland, the matter is regulated by federal laws which seek to prevent interstate double-taxation and, in Switzerland, also interlocal injustice.[1]

As between different nations, the only effective means of securing mutual regard for a fair apportionment of tax claims is by means of treaty arrangements, putting into effect the principles which we have been examining. In the absence of such treaties, it can only be hoped that each nation will seek to make its own practices just to its neighbors and trust to their sense of fair play to give equal consideration.

Formal adjournment of Section IX.

[1] Eheberg, in Handwörterbuch der Staatswissenschaften, III, 553–7; VIII, 1207.



